

19980103.ba v01_n861.bam.980103 v01_n862.bam.980103 v01_n863.bam.980103

>From ???@??? Sun Jan 04 01:45:10 1998
Message-Id: <199801031527.JAA06947@sco.theporch.com>
Date: Sat, 3 Jan 1998 09:27:26 CST
Subject: BOATANCHORS digest 1861

BOATANCHORS Digest 1861

Topics covered in this issue include:

- 1) Re: National Radio Club Web Page
by Bill Jarvis <B.H.Jarvis@hw.ac.uk>
- 2) WTB: Drake R-4B
by "JOSE V. GAVILA (EB5AGV/EC5AAU)" <eb5agv@ctv.es>
- 3) Strip-X for Litz and Enameled Wire
by "Ornitz, Barry L" <ornitz@eastman.com>
- 4) DX60 For Trade
by kb5ww@juno.com (George T Folse)
- 5) Re: Wanted: Manual for Heath HW-7 = will trade 2 - 813's or \$
by John Dilks <oldradio@worldnet.att.net>
- 6) RE: GC "Strip-X"
by Sandy W5TVW <ebjr@worldnet.att.net>
- 7) BA folks at Livermore
by "Parker, Al" <al_parker@research.kaiseral.com>
- 8) Re: 6L6 versions???
- by Sandy W5TVW <ebjr@worldnet.att.net>
- 9) Hallicrafters DD-1 Skyrider Diversity
by "Thomas G. Siglin" <sigtronics@ibm.net>
- 10) BC224 Parts/Advice Needed
by Jan Skirrow <dma@islandnet.com>
- 11) That Comforting Blue Glow
by Jan Skirrow <dma@islandnet.com>
- 12) RE: GC "Strip-X"
by Edward Zeranski <ejz@nosc.mil>
- 13) Re: RBB Pitfalls
by Bob Login <jlogin@gville.mindspring.com>
- 14) Re: RBB Pitfalls
by Bob Login <jlogin@gville.mindspring.com>
- 15) National NTE 9000??
by K1HC <K1HC@aol.com>
- 16) Re: BA folks at Livermore..and...
by Edward Zeranski <ejz@nosc.mil>
- 17) Re: RBB...
by William Donzelli <william@ans.net>
- 18) FS ART-13s, HP-606B, Code machine
by Jim Carrington <jcall@sirius.com>
- 19) Safer way to clean Litz

by Jim Carrington <jcall@sirius.com>
20) Grid Dip Meter
by Robert Norgard <kl7fm@yahoo.com>
21) WTB DX35 or DX40
by kb5wwj@juno.com (George T Folse)
22) SAFETY
by "Arden Allen" <aallen@sirius.com>
23) Re: BA folks at Livermore
by "Arden Allen" <aallen@sirius.com>
24) GRC-109 tx at FR
by BEN NOCK <G4BXD@compuserve.com>
25) Regen rcvr design
by aa1hb@juno.com (Charles M Cheney)
26) Re: SAFETY
by arc5@ix.netcom.com
27) T-350XM TRANSMITTER
by Bill Riches <richesb@algorithms.com>

Date: Fri, 02 Jan 1998 20:57:51 +2400
From: Bill Jarvis <B.H.Jarvis@hw.ac.uk>
To: keng <keng@uidaho.edu>
Cc: boatanchors <boatanchors@theporch.com>
Subject: Re: National Radio Club Web Page
Message-ID: <199801022057.UAA25290@punt1.hw.ac.uk>

On 1998-01-02 keng@uidaho.edu said:

ke>> I have a question; how do you type the symbol just before the
ke>gnbc? That is called a "tilde" and is on ALL normal keyboards.
ke>Usually it is too the left on the last key to the left on top.
ke>Ken

Try holding down "alt" whilst typing 126. Any other number for 255
interesting possibilities.

Bill, aka maestro@cix.co.uk.

GM8APX, qthr=No 6, EH4 6JY==Cave felem==No Rectangulars=Ikke Hawkering

Naturam expellas furca, tamen usque recurret

Net-Tamer V 1.10 - Registered

Date: Fri, 02 Jan 1998 22:05:01 +0100

From: "JOSE V. GAVILA (EB5AGV/EC5AAU)" <eb5agv@ctv.es>
To: DRAKE-L@fablotz.min.net
Cc: "Boatanchors List" <boatanchors@sco.theporch.com>
Subject: WTB: Drake R-4B
Message-ID: <3.0.1.32.19980102220501.006abe58@pop.ctv.es>

Hi gang,

Fisrt than anything else, I wish you a HAPPY 1998!

Well, here I am again looking for an R-4B... Perhaps the new year brings one :-)

I'm interested in buying a _complete_ (working or not) Drake R-4B receiver. The only part I would like to be operative is the power transformer, as I have no clue or where to find one here in Spain...

So, if you have an R-4B available, please, let me know by direct e-mail stating price, condition and everything you consider important about the unit.

Thanks a lot!

JOSE

73 EB5AGV / EC5AAU
JOSE V. GAVILA
Ausias March 46, 15
46910 Benetusser - VALENCIA
SPAIN

<http://www.geocities.com/SiliconValley/6992/>
e-mail: eb5agv@ctv.es & eb5agv@amsat.org

Date: Fri, 2 Jan 1998 16:47:01 -0500
From: "Ornitz, Barry L" <ornitz@eastman.com>
To: "'boatanchors@sco.theporch.com'" <boatanchors@sco.theporch.com>
Cc: "'aallen@sirius.com'" <aallen@sirius.com>
Subject: Strip-X for Litz and Enameled Wire
Message-ID: <c=US%a=_%p=Eastman%l=NTD150-980102214701Z-30437@ntd150.kpt.emn.com>

In some private mail to me, Arden Allen (KB6NAX), said he would try to determine if GC (General Cement) Strip-X was still produced. This prompted me to look at the MSDS information as the manufacturer's address must be listed. [BTW, Arden - you have their correct address.]

According to the most recent MSDS information I could find, GC has at least two formulations sold under the same name. In this case, the safety precautions are very similar. [In the case of "Goof-Off", a paint remover, one formulation is limonene based and comparatively safe, but another formulation sold under the same name is toluene based. The limonene formulation is excellent for removing tape and labels, but the toluene formulation will dissolve most plastics!]

Earlier I had written that Strip-X used phenol and potassium hydroxide. This was the composition used in a very old bottle I have in my lab. The new formulations contain either phenol or cresol, and methylene chloride with a few additional ingredients like wax and thickeners. The methylene chloride, unfortunately, makes the new variations do their job of stripping enamel off wires much better - but at the expense of greatly increasing their toxicity.

I hate to come across constantly as "gloom and doom" with chemical safety, but using this stuff is analogous to using a power saw: in the hands of a trained and careful carpenter, the saw greatly reduces his work; in the hands of a careless person, the same saw can remove fingers or worse. Strip-X can strip enameled wire but you must be careful when using it.

The new formulations of Strip-X can be deadly if a sufficient amount is absorbed through the skin. While I earlier suggested rubber gloves, I would now go further and recommend special chemical-resistant gloves. This stuff can eat right through latex. Safety glasses or goggles are a must. Allow me to quote a little from the MSDS for cresol. Phenol behaves much the same way, and methylene chloride with either will make the skin absorption much worse.

"CRESOL (MIXED ISOMERS): May cause severe irritation. Prickling and intense burning may occur after a few minutes followed by local anesthesia. Affected tissues may initially show white discoloration, wrinkling, and softening, which subsequently may become gangrenous. Sensitization dermatitis may occur in previously exposed persons. Cresols may be readily absorbed by skin to cause systemic effects which may be delayed 20-30 minutes. The symptoms may include headache, dizziness, vomiting, tinnitus, dimness of vision, irregular, rapid respiration, weak pulse, dyspnea, profound muscular weakness, and occasionally, mental confusion. If sufficient amounts are absorbed, vascular collapse, shock, hypothermia, jaundice, unconsciousness, and death may occur."

A very important point is the fact that after exposure, the material will quickly numb the contacted skin. Without pain, many people are likely to avoid treatment. Don't do it! If you spill much on you,

wash with soap and water for at least 15 minutes BEFORE seeing a doctor.

Strip-X is an extremely useful material when working with Litz or enameled wire. Like the power saw, it can be used safely if you take the proper precautions. A two-ounce bottle of Strip-X will last the average hobbyist for years and years.

Finally, at the end of the MSDS was a little reminder that I often forget - keep out of reach of children. I know most of us Boatanchorites do not have small children at home any more, but we should make a point to see that any chemical we use is kept away from children and animals.

Here's to a safe, yet fun New Year.

73, Barry L. Ornitz WA4VZQ ornitz@tricon.net

Date: Fri, 02 Jan 1998 17:05:30 EST
From: kb5ww@juno.com (George T Folse)
To: boatanchors@sco.theporch.com
Subject: DX60 For Trade
Message-ID: <19980102.160655.9606.0.kb5ww@juno.com>

All,

I have an extra DX60 (the first model not the AorB), that I would like to trade for a DX35 or a DX40 in good working condition with no mods or holes in the cabinet.

The DX60 works fine, there are a few minor scratches on the cabinet.
73s,

George Folse III KB5WWO kb5ww@juno.com
630 Dolhonde St.
Gretna, La. 70053
504-362-1896 ph/fax
Collector of Johnson, Heath, & Atwater Kent AMI#937

Date: Fri, 02 Jan 1998 17:10:12 -0500
From: John Dilks <oldradio@worldnet.att.net>
To: boatanchors@theporch.com
Subject: Re: Wanted: Manual for Heath HW-7 = will trade 2 - 813's or \$
Message-ID: <34AD65C4.4BB9@worldnet.att.net>

Thanks for the offers. I have a copy coming and a back-up if needed.

I have extra 813's if anyone needs any....

73' John Dilks, K2TQN

Date: Fri, 2 Jan 1998 23:29:36 +0000
From: Sandy W5TVW <ebjr@worldnet.att.net>
To: boatanchors@theporch.com
Subject: RE: GC "Strip-X"
Message-ID: <19980102232932.AAB1851@LOCALNAME>

The bottle I have was bought less than a year ago. GC catalog nr is 10-2602. Chemicals listed on it are:
Methylene Chloride (75-09-2), Phenol (108-95-2), Ammonia (7664-41-7)

I don't know what the numbers after the names mean as I'm no organic chemist!
I'll bet Barry knows!!!

I've used it for years with no problems. Then I played with all sorts of explosives and never got injured! It just takes some precautions for safety, even if spartan, and some common sense to ask "what if?" to keep youeself out of trouble!

73,
E. V. Sandy Blaize, W5TVW
"Boat Anchors collected, restored, repaired, traded and used!"
417 Ridgewood Drive
Metairie, LA., 70001

860 Hartley 'ECO' under construction**
*** Looking for a TRC-10 transceiver *****
*** Looking for an RAL receiver *****

Date: Fri, 02 Jan 1998 16:46:00 -0800
From: "Parker, Al" <al_parker@research.kaiseral.com>
To: BOATANCHORS-request@LISTSERV.TEMPE.GOV, boatanchors@theporch.com,
baswaplist@foothill.net
Subject: BA folks at Livermore
Message-ID: <Megw.7422972@post.fabrik.com>

There's a small BA group getting together at Livermore Sun. at 9AM at the

food wagon. Larry Rau, W6WUH, Heinz Breuer, KN6?? from Germany, Les, WB6ORZ, Dick Dillman, W6AWO, Al Parker, W8UT, Gene Rippen will be nearby, others?

Any & all welcome. Hope it's not too rainy.

73, Al, W8UT

Date: Sat, 3 Jan 1998 01:00:19 +0000
From: Sandy W5TVW <ebjr@worldnet.att.net>
To: bry@mnsinc.com, boatanchors@theporch.com
Subject: Re: 6L6 versions???
Message-ID: <19980103010017.AAA3903@LOCALNAME>

At 10:36 PM 1/2/98 +0000, you wrote:

>FAR more tubes are used as linear amplifiers still.

>

>Sorry but his point stands that 6L6 tubes are still being
>manufactured and sold, whereas transistors have pretty much gone by
>the wayside.

>

>Bry, AF4K

>*****

>

Bry,

I have to agree with you. The 6L6 was a classic design! It
fathered smaller
versions (6V6) and transmitting versions (807) and many permutations.

Way back in the early 60's an engineer friend of mine once told me
that had transistors been invented first, the invention of the vacuum tube
(radio valve)

would have been as epoch making as the transistor. Even though I think he
REALLY didn't know WHAT he had, we have to give it to Lee DeForest and his
peculiar ego, for persisting and "wanting to be great" in the radio art.

Lee was

a "tinkerer" like Thomas Edison and others, not a true "Scientific" type like
Armstrong, Fessenden and others.

Tubes are still exciting gadgets. I continue after allo these years of
transistors and IC's to MARVEL at using a one tube (dual triode) regenerative
receiver made from one 1J6G tube! It's mind boggling!

73,

E. V. Sandy Blaize, W5TVW

"Boat Anchors collected, restored, repaired, traded and used!"

417 Ridgewood Drive

Metairie, LA., 70001

860 Hartley 'ECO' under construction**
*** Looking for a TRC-10 transceiver *****
*** Looking for an RAL receiver *****

Date: Fri, 02 Jan 1998 20:25:35 -0500
From: "Thomas G. Siglin" <sigtronics@ibm.net>
To: boatanchors@theporch.com
Subject: Hallicrafters DD-1 Skyrider Diversity
Message-ID: <34AD938F.3195@ibm.net>

A note to those interested in the Hallicrafters DD-1 receiver:
I am in the process of finishing my 3rd try covering this circa
1937 dual diversity design. I would appreciate suggestions and
comments. I would really appreciate additional material and a four
gang rear tuning condenser:

<http://ww1.photomicrographics.com/webpages2/pmi/dd1/rearcond.htm>

this view does not show the bandspread section on the bottom of the
condenser.) I have seen pictures of other Hallicrafters receivers
using this style part but not with four sections.

Without this part, the radio is only a pretty box....If you
can help me locate a condenser or a source to repair mine,
please let me know.

The site contains scans of the original documentation and sales lit.
as well as QST articles related to the receiver.

URL for page: <http://www.geocities.com/SoHo/7934>

The geocities site is currently a link to my work site. As soon
as the page settles down, I'll move the majority of it back to
geocities.

Thanks, Tom

Date: Fri, 02 Jan 1998 14:43:08 -0800
From: Jan Skirrow <dma@islandnet.com>
To: <boatanchors@theporch.com>
Subject: BC224 Parts/Advice Needed

Message-ID: <Version.32.19980102143227.00f2fc40@mail.islandnet.com>

I picked up a good condition BC224G recently and I'd like to restore it to its original configuration.

The only mod was the removal of the power plug and what looks to be a retaining plate that held it in place. I assume this plug is the same in both the 224 and 348 series. So I need one as well as the matching socket and whatever hardware fastens the plug to the chassis. While I'm fantasizing, I'd love to find the radio's mounting plate with vibration dampers.

The manual says to lubricate the dynamotor with Air Corps grade 375 grease. Any suggestions about what is best to use some 50 years on????

Thanks

Jan Skirrow, VE7DJX

Date: Fri, 02 Jan 1998 14:42:45 -0800
From: Jan Skirrow <dma@islandnet.com>
To: <boatanchors@theporch.com>
Subject: That Comforting Blue Glow
Message-ID: <Version.32.19980102143905.00fc0210@mail.islandnet.com>

Hi BAites

How much gas is too much gas in a transmitting tube? I assume the resting current will increase with increasing gas until at some point gaseous discharge occurs, and things start to get exciting. But how do you judge when the tube has had it and must be replaced???

Thanks

Jan Skirrow, VE7DJX

Date: Fri, 02 Jan 1998 18:56:04 -0800
From: Edward Zeranski <ejz@nosc.mil>
To: ebjr@worldnet.att.net
Cc: boatanchors@theporch.com
Subject: RE: GC "Strip-X"
Message-ID: <3.0.1.32.19980102185604.006da1b4@marlin.nosc.mil>

At 11:29 PM 1/2/98 +0000, you wrote:

> The bottle I have was bought less than a year ago.

>Methylene Chloride

>I don't know what the numbers after the names mean as I'm no organic chemist!

>I'll bet Barry knows!!!

>

>I've used it for years with no problems. Then I played with all sorts of
>explosives and never got injured!

We used MethylChloride to strip residue from optical fibers before fusion or epoxy based connection. No bad side effects so far??? Other than a certain affinity for old radio stuff and wooden boats. But, hey, I used to rinse off PCB based cooling fluid with Trichlorethelene (or how ever trico is spelled)followed by industrial Freon. Then fire the maggie or TWT.... Sure it will show up later.

Date: Fri, 02 Jan 1998 21:37:30 -0500

From: Bob Login <jlogin@gville.mindspring.com>

To: wallace@world.std.com

Cc: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: RBB Pitfalls

Message-ID: <199801030255.VAA07903@brickbat8.mindspring.com>

Hi Andy--My RBB required me to remove the band switch and take out each can. Once apart, I cleaned the switch waffers with deoxit. Make sure you remove the band switch with the 2nd band in line --the waffers hve a line-up mark-a black dot.

when I cleaned the switches the osc worked as did everthing else. I also found many resistors much higher in value than spec and replaced them also. Love the radio, the size, the meters--full speed ahead dam the torpedos

At 05:36 PM 1/2/98 GMT, you wrote:

>Hello, Jim Hill <jshillw6ivw@earthlink.net>!

>

>Jim, I think your lack of word-wrap in Eudora is due to the

>MIME-QUOTED-PRINTABLE setting. I had to change mine in my mail/news

>program (Agent, by www.forteinc.com).

>

>>I'm responding to Jack Antonio's request on RBB radios.

>

>>If the receiver doesn't work when you try it out, listen for the

oscillator with another receiver.
>>oes it seem to be roughly at the correct frequency +/- 500 kHz from the
dial frequency, if I remember correctly?
>>ometimes, the band change stop is missing and the wrong coils are
selected. I think it can be corrected
>>ontinuing to turn the band change knob, around and around.
>
>You may have just earned yourself a cookie! My RBB does not oscillate,
>or does not seem to... I can touch the metal link near the left of the
>rx and get longwave stations, so the other parts are OK, but no osc...
>I bet this is the trouble. I just tried turning the knob and it will
>do the following:
>STOP-1-2-3-4-1-2-3-4-STOP. I wonder if this is what you're speaking
>of. Bet my rx was on the wrong set-of-four and I am usually careful so
>I probably never tried to go beyond either side of whichever 1-2-3-4
>it was on. THANK YOU. I am going to unbury the set (ugh, my
>"used-repairable" CE-100V and AR-88 are on top!), connect the PS, and
>give that a try. The List will hear from me later!
>
>How do you -- or other List members -- like the performance of the
>set?
>
>
>--Andy
>wallace@world.std.com
>How many boards would the Mongols hoard if the Mongol
>hordes got bored?
>

Date: Fri, 02 Jan 1998 21:38:21 -0500
From: Bob Login <jlogin@gville.mindspring.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: RBB Pitfalls
Message-ID: <199801030256.VAA08111@brickbat8.mindspring.com>

>Date: Fri, 02 Jan 1998 21:37:30 -0500
>To: wallace@world.std.com
>From: Bob Login <jlogin@gville.mindspring.com>
>Subject: Re: RBB Pitfalls
>Cc: Old Tube Radios <boatanchors@theporch.com>
>

>Hi Andy--My RBB required me to remove the band switch and take out each
>can. Once apart, I cleaned the switch waffers with deoxit. Make sure you remove
>the band switch with the 2nd band in line --the waffers hve a line-up
mark-a black dot.

>when I cleaned the switches the osc worked as did everthing else. I also
found many
>resistors much higher in value than spec and replaced them also. Love the
radio, the size,
>the meters--full speed ahead dam the torpedos
>
>
>At 05:36 PM 1/2/98 GMT, you wrote:
>>Hello, Jim Hill <jshillw6ivw@earthlink.net>!
>>
>>Jim, I think your lack of word-wrap in Eudora is due to the
>>MIME-QUOTED-PRINTABLE setting. I had to change mine in my mail/news
>>program (Agent, by www.forteinc.com).
>>
>>>I'm responding to Jack Antonio's request on RBB radios.
>>
>>>If the receiver doesn't work when you try it out, listen for the
oscillator with another receiver.
>>>oes it seem to be roughly at the correct frequency +/- 500 kHz from the
dial frequency, if I remember correctly?
>>>ometimes, the band change stop is missing and the wrong coils are
selected. I think it can be corrected
>>>ontinuing to turn the band change knob, around and around.
>>
>>You may have just earned yourself a cookie! My RBB does not oscillate,
>>or does not seem to... I can touch the metal link near the left of the
>>rx and get longwave stations, so the other parts are OK, but no osc...
>>I bet this is the trouble. I just tried turning the knob and it will
>>do the following:
>>STOP-1-2-3-4-1-2-3-4-STOP. I wonder if this is what you're speaking
>>of. Bet my rx was on the wrong set-of-four and I am usually careful so
>>I probably never tried to go beyond either side of whichever 1-2-3-4
>>it was on. THANK YOU. I am going to unbury the set (ugh, my
>>"used-repairable" CE-100V and AR-88 are on top!), connect the PS, and
>>give that a try. The List will hear from me later!
>>
>>How do you -- or other List members -- like the performance of the
>>set?
>>
>>
>>--Andy
>>wallace@world.std.com
>>How many boards would the Mongols hoard if the Mongol
>>hordes got bored?
>>
>

Date: Fri, 2 Jan 1998 22:07:22 EST
From: K1HC <K1HC@aol.com>
To: boatanchors@theporch.com
Subject: National NTE 9000??
Message-ID: <65e98399.34adab6c@aol.com>

Hi everyone-

Anyone able to help with info on the National NTE 9000 xtal controlled xmtr for 10-20-40-80 mtrs? It is presently holding an xtal for 3633 KHZ. I just picked it up tonight - saved from the dumpster by another ham who passed it to me. I'd be happy to pay for a manual copy. Thanks!
73,

Dick, K1HC

Date: Fri, 02 Jan 1998 19:31:53 -0800
From: Edward Zeranski <ejz@nosc.mil>
To: al_parker@research.kaiseral.com,
Old Tube Radios <boatanchors@theporch.com>
Cc: boatanchors@theporch.com
Subject: Re: BA folks at Livermore..and...
Message-ID: <3.0.1.32.19980102193153.006d4f18@marlin.nosc.mil>

At 04:46 PM 1/2/98 -0800, Parker, Al wrote:

>There's a small BA group getting together at Livermore Sun. at 9AM at the
>food wagon. Larry Rau, W6WUH, Heinz Breuer, KN6?? from Germany, Les,
>WB6ORZ, Dick Dillman, W6AWO, Al Parker, W8UT, Gene Rippen will be nearby,
>others?
>Any & all welcome. Hope it's not too rainy.
>
>73, Al, W8UT
>

Tomorrow is the Santee swap just east of San Diego. Will be there approx 0645 with Doug WA6VOV(car probs so will pick 'em up) in an orange 74 VW Westfalia, veteran of many Mexico, Borrego, Arizona etc excursions. John Kolb may be present, to pick up my TV10 manual for copy. Any BA folk in the area who attend look for bearded knomes who look like Jerry Garcia on a bad hair day. (no hair day?) . Anyway just wanted to make a post like the other fests/swaps to attract some SOCAL tube based locals for face time and future contact. Will hang near the the grub truck approx 0730, bearded as before with old grey Bean's wool cap, gas station shoes, and shorts.....even in the rain. Anyway..Doug just retired Wednesday, loaned him a backup screw top GRC-109 yesterday, he used the TX with small supply

to work Japan today on 17mtrs CW, Drake 2B RX. Is that multiculturalism or what???? See ya in Santee.

Ed Zeranski This is a private opinion or statement.
home email: ezeran@cris.com

Date: Sat, 3 Jan 1998 00:28:35 -0500 (EST)
From: William Donzelli <william@ans.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: RBB...
Message-ID: <Pine.GS0.3.96.980103002323.12638B-1000000@titan.purch.ans.net>

> How do you -- or other List members -- like the performance of the
> set?

When I was still active (and soon will be again!) I enjoyed my RBB-3 more than any other set. Of the sets I used (or attempted to, anyway), the ranking was something like RBB-3, RAL-7, RAO-7, RCH, and then DAQ.

William Donzelli
william@ans.net

Date: Fri, 02 Jan 98 22:51:22 -800
From: Jim Carrington <jcall@sirius.com>
To: boatanchors@theporch.com
Subject: FS ART-13s, HP-606B, Code machine
Message-ID: <199801030638.WAA27973@mail3.sirius.com>

Hi Guys,
I've got to make some room and need to part with some gear. The following is pickup only or I can deliver to the Livermore swap meet this sunday. I'm in San Francisco. All prices are my cost or less.

- 1) 2 ART-13 transmitters (not tested)
 - 1 - with shock mount - cosmetically 7 on a scale of 1-10 - \$110
 - 1 - no shock mount but has LF tuning unit, almost new condition until UPS dented case, dinged knob, broke antenna insulator and 1 handle (I have new handle from Fair Radio and substitute insulator) - \$100

accessories for above :
CU-24/ART-13 antenna shunt capacitor - \$20

Maintenance manual - AN 08-30ART13-5 (original 2 in. thick) - \$38
28 v dynamotor DY-17A/ART 13A (New) - \$55
28 v dynamotor #500D35WA used (same as DY-17A) - \$25
pilots control box C-87/ART-13 with Cannon connector - \$15
4 spare 813 PA tubes - 2 nib (AES price \$38 each), 2 probably used - nib \$19
ea, used \$6 ea.
Cannon connector set - NEW set of U7, U9, and U10 - \$90 (my cost !)
Cannon connector set - used set of U7, U9 and U10 - \$45

I will give the buyers of the ART-13s first crack at the accessories

2) HP-606B HF signal gen.(works ok) cosmetically 6 on a scale of 1-10 (with manual copy) - \$65

HP-8708 synchronizer for 606B above (untested as I dont have manual) - \$15

3) Military code practice machine with box of paper tapes (tag says Keyer TG-34A) untested

This unit is very clean in an olive drab case (black wrinkle inside) and has a wooden box

of paper tapes to play - \$25

73s

Jim Carrington

Date: Fri, 02 Jan 98 23:26:44 -800
From: Jim Carrington <jcall@sirius.com>
To: boatanchors@theporch.com
Subject: Safer way to clean Litz
Message-ID: <199801030713.XAA29178@mail3.sirius.com>

I recently had the need to strip some Litz wire and found a technique in a Rider book called "How to Build Electronic Equipment" (J. Richard Johnson 1962). It says that industry practice is to use a gas or alcohol lamp and a small can of alcohol for quenching. The method in the book says " hold the end of the wire in the flame until the insulation burns off and the wire turns cherry red (no longer !). Then, quickly plunge the hot end into a can of alcohol. The insulation and enamel should now be removed and the wire strands left clean and bright." Be careful that the can of alcohol doesnt catch fire , but if it does, cover it with a metal lid to put it out.

I didnt have an alcohol lamp but I tried a micro butane torch and it cleaned off the insulation well but was probably too hot as the wire started melting in a second or so making it more tricky. I also left out the alcohol quenching as I didnt have alcohol at hand. The wire came out with some oxidation on the surface but I was able to solder to it with a bit of difficulty. I suspect the alcohol lamp and quenching to prevent oxidation would work better and I may try it next time.

73s '
Jim

Date: Fri, 2 Jan 1998 23:35:36 -0800 (PST)
From: Robert Norgard <kl7fm@yahoo.com>
To: boatanchors@theporch.com
Subject: Grid Dip Meter
Message-ID: <19980103073536.23490.rocketmail@send1a.yahoomail.com>

I just received a Millen #90651 grid dip meter for Christmas. After a little work replacing the AC cord, the meter works (and looks) like new. I don't have the manual to this, however. I have used one considerably years ago, but would like a copy of the manual. I don't think it's many pages. Would anyone out there have or be able to make me a copy? I will pay for the copy charge and postage, of course. Also, anyone care to pass along one of their Hints & Kinks in using one of these jewels? This one is within a pencil width of the correct frequency on all scales.

Thanks,

Bob Norgard - KL7FM

DO YOU YAHOO!?
Get your free @yahoo.com address at <http://mail.yahoo.com>

Date: Sat, 03 Jan 1998 03:16:44 EST
From: kb5wwwo@juno.com (George T Folse)
To: boatanchors@sco.theporch.com
Cc: heath@listserv.tempe.gov
Subject: WTB DX35 or DX40
Message-ID: <19980103.021833.4750.2.kb5wwwo@juno.com>

Hello All,

I am looking for a DX35 or a DX40 in good working condition, no holes in the cabinet or mods. I still have a DX60 if anyone is interested in a

trade.
73s,

George Folse III KB5WWO kb5www@juno.com
630 Dolhonde St.
Gretna,La. 70053
504-362-1896 ph/fax
Collector of Johnson,Heath,& Atwater Kent AMI#937

Date: Sat, 3 Jan 1998 00:32:55 -0800
From: "Arden Allen" <aallen@sirius.com>
To: "Old Tube Radios" <boatanchors@theporch.com>,
"Ornitz, Barry L" <ornitz@eastman.com>
Subject: SAFETY
Message-ID: <199801030832.AAA08541@mail2.sirius.com>

Barry Ornitz, if I may quote you:

"I hate to come across constantly as "gloom and doom" with chemical safety, but using this stuff....."

I commend you for expressing your concern for the safety of those who, in using hazardous chemicals, are prone to misuse, abuse or otherwise disregard their's or someone else's personal safety. It's ironic that at this time the Kennedy family is burying one of their own because of Michael's carelessness, inspite of rules of conduct and safety warnings specifically forbidding playing catch while skiing (according to news reports he was playing catch with a water filled plastic bottle when he hit a tree and was fatally injured). Accidents happen but are much more likely to happen to those who ignore the warnings.

On the other side of the coin is the problem of conveying safety warnings which are effective in that they inform an inexperienced but otherwise diligent person to equip him/her with the means to safely manage the use of hazardous materials. Poorly expressed safety information may have the effect of creating exaggerated fear and confusion which does not help so much as it spoils the efforts and enjoyment associated with an enriching hobby like ours.

My personal philosophy is that life must have risks in it to be enjoyable and fullfilling. Not the risks of the dangerous fool but the risks of not doing the best we are capable of. The wise person will seek to learn about safety issues and adopt safe practices. That doesn't mean he/she will never make a mistake.

So let's endeavor to inform our fellow anchorites about hazards but let's

also be sure we tell the whole story about what is hazardous, how it is hazardous and what to do to use it safely. In the future you can be sure that I will include "SEE SAFETY WARNING BELOW" in any postings mentioning the use of hazardous materials or practices. Such warnings will be BRIEF, TO THE POINT, and will REFRAIN FROM HYSTERIA AND NONSENSE about the particular safety issue. I recommend we all do that. Let's all have a safe and happy life.

Give your loved ones Gummy Bears.
Arden Allen KB6NAX Vallejo, CA aallen@sirius.com

Date: Sat, 3 Jan 1998 01:09:58 -0800
From: "Arden Allen" <aallen@sirius.com>
To: "Old Tube Radios" <boatanchors@theporch.com>
Subject: Re: BA folks at Livermore
Message-ID: <199801030908.BAA09277@mail2.sirius.com>

Al;

> There's a small BA group getting together at Livermore Sun. at 9AM at the
> food wagon. Larry Rau, W6WUH, Heinz Breuer, KN6?? from Germany, Les,
> WB6ORZ, Dick Dillman, W6AWO, Al Parker, W8UT, Gene Rippen will be nearby,
> others?
> Any & all welcome. Hope it's not too rainy.

Would you, or anyone, like to suggest an HT frequency for the BA get together just in case we don't all land on target at zero hour?

Give your loved ones Gummy Bears.
Arden Allen KB6NAX Vallejo, CA aallen@sirius.com

Date: Sat, 3 Jan 1998 07:55:42 -0500
From: BEN NOCK <G4BXD@compuserve.com>
To: Multiple recipients of 1 <boatanchors@sco.theporch.com>
Subject: GRC-109 tx at FR
Message-ID: <199801030756_MC2-2DE2-5390@compuserve.com>

Does anyone know if FR has any of the GRC-109 tx =
units left. (its rather a long distance call from here !)

Ben G4BXD.

Date: Sat, 3 Jan 1998 08:10:18 -0500
From: aa1hb@juno.com (Charles M Cheney)
To: boatanchors@sco.thePorch.com
Subject: Regen rcvr design
Message-ID: <19980103.081021.8998.2.aa1hb@juno.com>

Happy New Year!

I am trying to build the 2-tube regen in the 1937 ARRL handbook. It uses an interstage transformer described as a UTC Type CS1. I would like to get the specs for this transformer so I can find a substitute.

Also, a lot of the old designs for regen receivers use very high value chokes (several hundred henrys) in the audio output. Some designs also use devices they refer to as "audio couplers" which consist of a high value choke, a resistor, and a cap. These also appear to be unobtainium. I have never seen these chokes or audio couplers even at flea markets. Can anyone suggest a source or a substitute?

Charlie AA1HB (aa1hb@juno.com)

Date: Sat, 3 Jan 1998 07:08:56 -0600 (CST)
From: arc5@ix.netcom.com
To: aallen@sirius.com
Subject: Re: SAFETY
Message-ID: <1998137725711478@>

aallen@sirius.com spanked:

>...Such warnings will be BRIEF,
>TO THE POINT, and will REFRAIN FROM HYSTERIA AND NONSENSE
>about the particular safety issue....

My! You don't, by chance, wear a bowler hat
and carry an umbrella to work??

Now why on earth would you deny the writer the valuable tools of "hysteria" and "nonsense?" They quicken the author's words, sparking fun and the tiniest bit of excitement in the reader. Why, they even stir the spirits of the stuffy,

moving them to post something, by Daisy!

More importantly, they help the reader *remember*
the point thus effervescently expressed.

"Warning: Wear eye protection when cutting glass."
isn't just boring and droll...
it's lifeless to the listener's ear,
sinking to the ground before fairly spoken-
a tired puddle of words
as dead as week-old horse flop
and just as ignored.

Watch this--

("dump...dedump, dump....")
Sgt. Friday: "Warning: Wear eye protection when cutting glass."
Gannon: "Listen to him, Radar! Oops! Wrong show!"
("dump...dedump, dump....DAHMMMMHHHdump!")

Now that will get remembered.

Don't spurn the writer's small bit of nonsense.
Life's hard enough.

Yours in friendly mutual diatribe,
Dave Stinson AB5S
arc5@ix.netcom.com

(Post-Script for the stuffy and offended.
Normal people may ignore.)

Gads.... I hear someone whimpering:
"what's all this got to do with tubes?...sniffle..."
OK....

"Duhhhh....I gots a question...duheeee, duheeee....
How comes when I plugs a 5U4 toob in dah socket I
tuk out my 6V6 from it don't works? Dah plugs is
dah same soes it should woreek, right? Duhee...
Which way did they go, George?"

Now if *that* doesn't connect tubes and nonsense,
nothing shall!

Date: Sat, 03 Jan 1998 10:23:42 -0500
From: Bill Riches <richesb@algorithms.com>
To: boatanchors@theporch.com
Subject: T-350XM TRANSMITTER
Message-ID: <34AE57EF.1789@algorithms.com>

Greetings,

I am restoring a T350XM transmitter manufactured by Technical Radio Company, SanFrancisco, CA. It was built in 1945 under Contract NR W-36-039 SC17338. File # 27403 Phila 45-06 Serial 762. It may have come out of the Philadelphia Navy Yard. I have manuals and no parts problems - should have the rig on the air in a month. I wonder if any of you have any information on what and where this rig was used. I will be sending an article and pictures to Electric Radio. It can be classified a BA as it weighs 690 pounds. Any historical info would be appreciated.

73,

Bill Riches, WA2DVU
Cape May, NJ

End of BOATANCHORS Digest 1861

>From ???@??? Sun Jan 04 01:45:36 1998
Message-Id: <199801031854.MAA06404@sco.theporch.com>
Date: Sat, 3 Jan 1998 12:54:00 CST
Subject: BOATANCHORS digest 1862

BOATANCHORS Digest 1862

Topics covered in this issue include:

- 1) Re: combined LCR interstage component
by Bill Jarvis <B.H.Jarvis@hw.ac.uk>
- 2) Re: SAFETY and BUNGLING
by Bill Jarvis <B.H.Jarvis@hw.ac.uk>
- 3) Re: Strip-X for Litz and Enameled Wire
by Henry van Cleef <vancleef@netcom.com>
- 4) AT-1 backwave
by Avery Comarow <acomarow@USNEWS.COM>
- 5) Items FS and some wants...
by "Owens, Clarence" <owensc@nebeng.otis.com>
- 6) 51J4 / 70E15 PTO Problems

- by Dan Martin <dmartin@visuallink.com>
- 7) Grid Dip Oscillators
by MAB@delphi.com
 - 8) Re: AT-1 backwave
by "Arden Allen" <aallen@sirius.com>
 - 9) Re: Grid Dip Meter
by Henry van Cleef <vancleef@netcom.com>
 - 10) Re: 51J4 / 70E15 PTO Problems
by "Mike B. Feher" <n4fs@monmouth.com>
 - 11) Re: GRC-109 tx at FR
by "J. Herman" <jherman@sierra.net>
 - 12) Re: freq hangout??
by L & M <toneri@ils.net>
 - 13) 51J4 / 70E15 PTO Problems
by "Arden Allen" <aallen@sirius.com>
 - 14) Re: T-350XM TRANSMITTER
by Ken Gordon <keng@uidaho.edu>
 - 15) Re: 51J4 / 70E15 PTO Problems
by Michael Hanz <AAFRadio@erols.com>
 - 16) KH Power supply and Rider Chanalyst
by Mary & Ray Jefferson <w7fni@micron.net>
 - 17) Another component source
by "J. Herman" <jherman@sierra.net>
 - 18) Surplus tubes
by Bill Jarvis <B.H.Jarvis@hw.ac.uk>
 - 19) ax9909 AES
by "larry W6WUH" <rau@wco.com>
 - 20) W6WUH Outta Town
by "larry W6WUH" <rau@wco.com>
 - 21) Al Culbert
by "larry W6WUH" <rau@wco.com>
 - 22) SAN ANTONIO FEST
by arc5@ix.netcom.com
 - 23) RE: Regen Receiver Design
by Al Klase <skywaves@bw.webex.net>
 - 24) Today's Dallas Sidewalk Sale
by Spencer Petri <spetri@e-tex.com>

Date: Sat, 03 Jan 1998 15:28:56 +2400
From: Bill Jarvis <B.H.Jarvis@hw.ac.uk>
To: aa1hb <aa1hb@juno.com>
Cc: boatanchors <boatanchors@theporch.com>
Subject: Re: combined LCR interstage component
Message-ID: <199801031528.PAA26066@punt1.hw.ac.uk>

On 1998-01-03 aa1hb@juno.com said:

aa>Happy New Year!

aa>Some designs also use devices they refer to as "audio couplers"
aa>which consist of a high value choke, a resistor, and a cap. These
aa>also appear to be unobtainium. I have never seen these chokes or
aa>audio couplers even at flea markets. Can anyone suggest a source or
aa>a substitute? Charlie AA1HB (aa1hb@juno.com)

In the VERY distant past I believe I came across what I thought was an interstage transformer but it turned out to be a bakelite box with screw terminals, containing L, C and R.

More recently I have seen, in a presently published periodical devoted to vintage wireless, a reprint of an advert offering such an item for sale, and promising dramatic improvement in audio quality.

I only follow 3 such periodicals, but I don't have room to keep back numbers so I give them to an even older timer along the road.

BUT if I see that ad again I'll post details.

The periodicals are: "405 Alive" (TV orientated), "The Radiophile", and "Radio Bygones". The last-named recently reprinted Valve Data Books from the '30s to the late '60s, at a very reasonable price. It's those I quote from when I recognise valves being asked about on these pages.

Regarding a SUBSTITUTE (for the LCR component), separate items (L, C and R) should work fine. If you have time to tell me what tubes the coupling comes between, and approximate working B+ (HT) voltage, I could make inspired guesses for you. Probably the L is a bit of a luxury and a suitable R would work FB with no audible difference.

N.B. I'm often wrong.....

Bill, aka maestro@cix.co.uk.

GM8APX, qthr=No 6, EH4 6JY==Cave felem==No Rectangulars=Ikke Hawkering

Memoria minuitur, nisi eam exerceas

Net-Tamer V 1.10 - Registered

Date: Sat, 03 Jan 1998 15:29:02 +2400
From: Bill Jarvis <B.H.Jarvis@hw.ac.uk>
To: arc5 <arc5@ix.netcom.com>

Cc: boatanchors <boatanchors@theporch.com>
Subject: Re: SAFETY and BUNGLING
Message-ID: <199801031528.PAA26069@punt1.hw.ac.uk>

On 1998-01-03 arc5@ix.netcom.com said:
ar>aallen@sirius.com spanked:
ar>>...Such warnings will be BRIEF,
....
ar>"what's all this got to do with tubes?...sniffle..."
ar>OK....
ar>"Duhhhh....I gots a question...duheeee, duheeee....
ar>How comes when I plugs a 5U4 toob in dah socket I
ar>tuk out my 6V6 from it don't works? Dah plugs is
ar>dah same soes it should woreek, right? Duhee...
ar>Which way did they go, George?"
ar>Now if *that* doesn't connect tubes and nonsense,
ar>nothing shall!

Yes, we've all met them. We should be grateful. Some of my most cherished bargains were discovered as rigs which had been "repaired" by George's friend in the above quote. After moving the tubes round a bit and failing to note the blown fuse, the expert ditched the thing - having done really very little damage.

I prefer that to finding that a little old lady has been charged 120 sterling to someone who resoldered, with a red hot poker, a snapped transformer winding connection, or shortened her line-cord dropper so that the poor thing could run on 230 instead of 120. Or concealed a poor quality modern transistor rx in a vintage cabinet leaving all those toobs not even glowing.

I usually ask "Do you want it to look good, or sound good, or both; or do you want to resell it for a fat profit? - because if it's Answer C, I'm not really the right person to help."

(If anyone has any unusual slide rules, now.....)

Bill, aka maestro@cix.co.uk.
GM8APX, qthr=No 6, EH4 6JY==Cave felem==No Rectangulars=Ikke Hawkering

Capax imperii - nisi imperasset

Net-Tamer V 1.10 - Registered

Date: Sat, 3 Jan 1998 09:35:14 -0700 (MST)
From: Henry van Cleef <vancleef@netcom.com>
To: ornitz@eastman.com
Cc: boatanchors@theporch.com
Subject: Re: Strip-X for Litz and Enameled Wire
Message-ID: <199801031635.IAA12608@netcom8.netcom.com>

As Ornitz, Barry L discourses

>
> I hate to come across constantly as "gloom and doom" with chemical
> safety, but using this stuff is analogous to using a power saw: in
> the hands of a trained and careful carpenter, the saw greatly reduces
> his work; in the hands of a careless person, the same saw can remove
> fingers or worse. Strip-X can strip enameled wire but you must be
> careful when using it.

>
> The new formulations of Strip-X can be deadly if a sufficient amount
> is absorbed through the skin. While I earlier suggested rubber
> gloves, I would now go further and recommend special chemical-
> resistant gloves. This stuff can eat right through latex. Safety
> glasses or goggles are a must. Allow me to quote a little from the
> MSDS for cresol. Phenol behaves much the same way, and methylene
> chloride with either will make the skin absorption much worse.

>
I have used several bottles of Strip-X over the past 40+ years and I
am pretty sure that all of them had a methylene chloride paint remover
in them. That is what is in the current bottle (purchased 1994). No
question that what's in the bottle is vicious stuff. However, it's
the only stuff I know that will strip Litzendraht for soldering
reliably.

I use the housewife gloves sold in the groceries. These are "proof"
against Dow oven cleaner and most paint removers, as long as you don't
damage them mechanically. Eye protection is absolutely mandatory, and
you need a source of water---lots of it---for quick flushing. Water
at body temperature is best. The fumes are also bad news---use in a
ventilated (moving air) area.

To strip Litzendraht:

- a. remove the textile serving from the wire back about 1/4 inch or
5mm. (not the same, but you get the idea).
- b. dab on Strip-X. It helps to have a small block of wood (scrap) to
work against. Wet all of the wires in the open area.
- c. After 3-5 minutes, dip in a pot of water and work the Strip-X with
enamel off the wires with a piece of rag or similar.
- d. Allow to air-dry for about 1/2 hour.

- e. Solder termination using rosin core solder. A little brush-on flux (mild stuff sold for electrical work, not the vicious nasty acid used for sheet metal work) will help.
- f. Once solder joint has been made and cooled, clean with swab dipped in isopropyl alcohol.

You only need to wear gloves for steps b. and c. Best way is to prepare a bunch of terminations at one time. If you get Strip-X on your skin, it will burn, and you'll know it. Flush with body temp water immediately. When you are ready to remove the gloves, rinse your hands thoroughly under a stream of running water before taking off either glove. This will get it off the gloves so you do not get it on your hands when removing the gloves.

Make sure that small children and pets can't get at this stuff. A locked cabinet is best. Also, do not store noxious chemicals in kitchen and food storage areas, even if you live alone. Make sure this stuff is stored away somewhere far from anything to do with food storage and preparation, take it out only when you are going to use it, and put it back IMMEDIATELY after you are done with it.

--

=====
Hank van Cleef
=====

Date: Sat, 3 Jan 1998 10:21:13 -0600 (CST)
From: Avery Comarow <acomarow@USNEWS.COM>
To: boatanchors@theporch.com
Subject: AT-1 backwave
Message-ID: <199801031621.KAA01558@sco.theporch.com>

Any AT-1 experts out there? A guy posted a request for help on Compuserve, and I told him I'd repost here (that okay, Jack?) and pass on any responses. Said experts can just email him (Gary W1ECH, 72764,400), but a post to the group might benefit other AT-1 owners.

Here's his query, and thanks on his behalf.

Avery W40GK

I own a lovely Heath AT-1, in mint shape, acquired from a friend a couple of years ago, but it has a terrible "backwave" (strong background oscillation) key up. I may be 589 key down and 569 key up! <s> I'm trying

to figure out why, and how to cure the problem; maybe it just needs neutralization, but I'm a bit removed these days from tubes!

Anyone have suggestions or know how to cure this problem? (For those unfamiliar with this rig, it's a 2-tube 6AG7-6L6 crystal-controlled transmitter, one of the Heath Company's very first kits.)

I'd love to plug in a crystal or two nowadays and use the little rig, for nostalgia sake! (As WN1ECH, in the 50's, my first rig was an AT-1.)

73,

Gary - W1ECH

Date: Sat, 03 Jan 1998 11:53:00 -0500
From: "Owens, Clarence" <owensc@nebeng.otis.com>
To: Boatanchors Post <boatanchors@theporch.com>
Subject: Items FS and some wants...
Message-ID: <0EM7VY4210096V@mailman.otis.com>

Hi Folks,

I have a few things for sale and also thought I'd list a few wants below:

Surplus Radio Conv manuals, Vols 1 and 2, \$20 each. Been used a lot but not smelly/moldy, no loose pages.

CQ Command sets book (Yellow cover), \$25. Cover is faded some from sunlight and has some creases from paging through the book, otherwise in vg condition.

Tektronix 422 scope manuals, one set of scope and power supply manuals for S/N 100-19,999 and one combined manual for S/N 20,000 and up, \$15 ea. (\$15 for both the 100-19,999 set books) Excellent condition.

TU-8B Tuning unit for BC-375/BC-191. Complete, good condition (some paint chipped from front panel), no CS-48 case. \$15.

All above are plus shipping/postage.

Wants:

TU-9(x) tuning unit for BC-375/BC-191

DM-28 dynamotor mount for BC-348 (I have the dynamotor), or the whole

dyno/mount.

HP 410B VTVM

I also need several of the accessories for the command sets, but don't want to make this list too long.

Trades would be welcome. I do have some misc. parts/spares for the WWII military and other gear, tubes, etc. that could be made part of a trade.

Thanks and 73,

Clare Owens N2RJB
owensc@nebeng.otis.com

Date: Sat, 03 Jan 1998 12:07:20 -0500
From: Dan Martin <dmartin@visuallink.com>
To: boatanchors@theporch.com
Subject: 51J4 / 70E15 PT0 Problems
Message-ID: <34AE7048.4AEE@visuallink.com>

Hello, all:

At issue is my absolutely CCA-Excellent 51J4, serial 1801. This unit is unmodified, all original - not a soldering iron has ever touched this rig and it resides in a near perfect J4 cabinet - a relatively rare accessory. I'm only the 3rd owner. Unit still has all the unused Bristol wrenches and alignment tools clipped in place. I've never aligned it, "checked it out", etc., at all. I've used it only for casual listening in the last three years. Did a lot of 49 and 41 meter BCB and SKN listening in the last week, especially. Lots of sigs everywhere, etc. Now I've discovered some issues that confuse me and make me wonder why the unit works very much at all.

The good news:

1. Unit has always seemed to work OK, as above, i.e., it seems to "hear well."
2. With a week off last week, my curiosity got the better of me and I started checking voltages and resistances, just to see where everything was. First time in my ownership I've done this, so well had it worked under casual use. (I very much subscribe to the "leave it well enough alone" school of electronic optimization and feel that poor and unnecessary alignments, etc., have hosed up many a good radio.) A quick check of spec. tube resistances and voltages finds nominal values everywhere except at V106, the second mixer for the variable i.f. and PT0.

The bad news:

1. Pin 1 at V106, input from the 3-2 mhz PTO, should be -0.2V. I measure about 0.0 at the high end of the mHz slide rule dial to +0.024 at the low end of the dial. At the 0.0 reading, the 410C meter quivers from barely - to barely +. This is the 2.000 mHz output of the PTO. As I turn the kHz freq. downwards, the bias moves to +0.024 after a couple of hundred hertz and remains there through to the 3.000 mHz end of the PTO at the left side of the slide rule dial.
2. I check the frequency at pin 1 V106. Get a nice 2.000 mHz PTO input to the mixer at the far right hand side of the mHz dial at "0" on the circular kHz dial. Good. I slowly start tuning down in frequency and watch the freq. counter ascend. At each 100 kHz waypoint on the slide rule mHz dial, the counter reads 2.099, 2.199, 2.299, 2.398, etc. Not perfect accuracy and linearity, but certainly reassuring.
3. Then, after reading 2.496 mHz PTO output at the halfway point on the slide rule dial ("only" 4 kHz off), the PTO frequency starts ascending at a much quicker rate. By the very next 100 kHz waypoint on the mHz dial past the mid-point, instead of approx. 2.595 mHz coming from the PTO, I get exactly DOUBLE that, 5.190 mHz! From that point on the PTO rate doubles, too, meaning that for every 100 kHz on the mHz slide rule dial, the PTO output goes up 200 kHz! By the left hand end of the mHz slide rule dial, the 3.000 end, the PTO output is 5.981. I don't think Art Collins intended this.
4. To add insult to injury, the frequency measured at the S0-239 i.f. output jack varies from 488 kHz at the low end of the mHz dial to 490 kHz at the high end. This in a radio with a 500 kHz i.f. The AC output here is about 0.2 to 0.3 VAC measured with the r.f. probe of my 410C. Is this low?

Anyone know anything about the 70E-15 PTO? How/why can it double its freq. output and freq. output rate from the midpoint on? Why a 10 kHz low i.f.? Why the low, almost no bias at pin 1, V106? And finally, why aren't such serious measurement discrepancies more evident in operation?

I'm wiped out. This in my near perfect J4. In its cabinet this could be a museum piece in Cedar Rapids. Of greater concern, some months back I was discussing a possible trade of this J4 with a well known and respected member of our fraternity and I certainly represented this unit as perfect. Thank goodness we both held off on that. I must make this right. Thanks for any input. I need some perspective here in a bad way!

73

Dan

WB4GRA

Winchester, VA

Date: Sat, 03 Jan 1998 12:13:23 -0500 (EST)
From: MAB@delphi.com
To: boatanchors@theporch.com
Subject: Grid Dip Oscillators
Message-ID: <01IRXUCEW2C29FUHLE@delphi.com>

On 3 Jan 98, Bob Norgard, kl7fm@yahoo.com wrote:

>I just received a Millen #90651 grid dip meter for Christmas. After a
>little work replacing the AC cord, the meter works (and looks) like
>new. I don't have the manual to this, however. I have used one
>considerably years ago, but would like a copy of the manual. I don't
>think it's many pages. Would anyone out there have or be able to make
>me a copy? I will pay for the copy charge and postage, of course.
>Also, anyone care to pass along one of their Hints & Kinks in using
>one of these jewels? This one is within a pencil width of the correct
>frequency on all scales.

Bob, you might want to locate either or both of the following books (my
copies are not for sale!!):

How to Use Grid-Dip Oscillators, Rev 2nd Ed, Rufus P. Turner, 1969

Servicing with Dip Meters, John D. Lenk, Sams DML-1 1965

The Rufus Turner book would be of special interest to you as it contains
the schematic diagram for the Millen Model 90651 unit you asked about.

BTW, The Grid-Dip Oscillator is my all-time favorite piece of RF test
gear - elegance in simplicity - and I think Hank van Cleef and many
others on the list share my sentiment. The various Millen and
Measurements models along with the military AN/PRM-10 Test Oscillator
Set are the "creme de la creme" (anybody got unobtainium Millen 46702,
46703, 46704 and 46705 low frequency coils they'd like to part
with? - grin), although the Eico 710 is also worthwhile because it's
frequency range extends down to 400 kc. with it's standard coil set.

Good luck and enjoy! Mike

Michael A. Burke, Test Equipment Junkie
mab@delphi.com Westminster, MA

Date: Sat, 3 Jan 1998 09:24:27 -0800
From: "Arden Allen" <aallen@sirius.com>

To: "Old Tube Radios" <boatanchors@theporch.com>, <acomarow@USNEWS.COM>
Subject: Re: AT-1 backwave
Message-ID: <199801031723.JAA17797@mail1.sirius.com>

> I own a lovely Heath AT-1, in mint shape, acquired from a friend a couple
> of years ago, but it has a terrible "backwave" (strong background
> oscillation) key up.

It SHOULD have a backwave. The 6AG7 xtal oscillator is not keyed, it is constantly running. If you want to modify it to key the oscillator along with the PA, connect the 100 ohm cathode resistor to the keying line. SAFETY WARNING: Cathode keyed transmitters such as the AT-1 present a high voltage to the key when the contacts are open, a person can receive a severe shock from the key.

Give your loved ones Gummy Bears.
Arden Allen KB6NAX Vallejo, CA aallen@sirius.com

Date: Sat, 3 Jan 1998 10:27:32 -0700 (MST)
From: Henry van Cleef <vancleef@netcom.com>
To: kl7fm@yahoo.com
Cc: boatanchors@theporch.com
Subject: Re: Grid Dip Meter
Message-ID: <199801031727.JAA15030@netcom8.netcom.com>

As Robert Norgard discourses

>
> I just received a Millen #90651 grid dip meter for Christmas. After a
> little work replacing the AC cord, the meter works (and looks) like
> new. I don't have the manual to this, however. I have used one
> considerably years ago, but would like a copy of the manual. I don't
> think it's many pages. Would anyone out there have or be able to make
> me a copy? I will pay for the copy charge and postage, of course.
> Also, anyone care to pass along one of their Hints & Kinks in using
> one of these jewels? This one is within a pencil width of the correct
> frequency on all scales.

>
I've forgotten what Millen supplied as data along with the 90651/90661 dips, but can guarantee you that it was dirt simple. However, the dips are dirt simple. Draw yourself a schematic by examining the dip. It's a simple Colpitts oscillator circuit.

Parts replacement is also simple. The selenium rectifier is replaceable by a 1N4005 diode. Most other troubles are traceable to a

9002 that doesn't want to oscillate. Try another tube in the socket.

The 90651's were tested at the factory to accuracy of "one marking width" at 3 points with each coil. About the only thing that will change calibration is mechanical damage, so if you've got the coilset that was shipped with the dip, and nothing has been damaged, you've probably got good calibration. The 90661's were the same dip, but hand-calibrated.

--

=====
Hank van Cleef
=====

Date: Sat, 3 Jan 1998 12:34:11 -0800
From: "Mike B. Feher" <n4fs@monmouth.com>
To: <dmartin@VISUALLINK.COM>, "Old Tube Radios" <boatanchors@theporch.com>
Subject: Re: 51J4 / 70E15 PTO Problems
Message-ID: <199801031733.MAA04233@shell.monmouth.com>

Dan -

I would not be too concerned about the frequency doubling as measured on the counter. Unless you are certain that the PTO output is perfectly sine then the doubling could be simply due to a distorted waveform. Possible loading by the counter could cause that. Remember that except for some small amount of hysteresis the counter looks at zero crossings and a small amount of second harmonic in the waveform might be enough to trigger the counter but not make a hill of beans in the receiver due to the fact that mixing the incoming signal with both the fundamental (strong signal) and the second harmonic (weak signal) still results in only the desired signal in the passband of the IF. The bias level could just be a function of a weak tube but it sure does not sound severe and seems like according to your testament the receiver seems to work fine. So - as the saying goes if it ain't broke don't fix it. BTW I used to live in Manassas for about 15 years until about 6 years ago. 73s & Happy New Year - Mike

Mike B. Feher, N4FS
89 Arnold Blvd.
Howell, NJ, 07731
732-901-9193

Date: Sat, 3 Jan 1998 09:34:07 -0800 (PST)
From: "J. Herman" <jherman@sierra.net>
To: BEN NOCK <G4BXD@compuserve.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: GRC-109 tx at FR
Message-ID: <Pine.SUN.3.95.980103092728.3767A-1000000@diamond.sierra.net>

On Sat, 3 Jan 1998, BEN NOCK wrote:
> Does anyone know if FR has any of the GRC-109 tx
> units left. (its rather a long distance call from here !)

Email 'em, Ben! fairradio@alpha.wcoil.com, or take a peek at their
homepage: <http://alpha.wcoil.com/~fairradio/>
They're very prompt in replying.
73,
Jeff KH2PZ / 7 K7/H0CW

Date: Sat, 3 Jan 1998 12:32:51 -0500 (GMT-0500)
From: L & M <toneri@ils.net>
To: sklords@sprynet.com
Cc: "glowbugs@www.atl.org" <glowbugs@www.atl.org>,
HEATHKIT <HEATH@LISTSERV.TEMPE.GOV>,
Subject: Re: freq hangout??
Message-ID: <199801031732.MAA15321@server1.ils.net>

At 01:01 PM 1/2/98 -0700, Steven K. Lords wrote:
>before i order crystals,
>what are the popular freq's that people hang out on??
>
>need to find info on different types of crystals
>anybody know a good source???
>
>thanks
>steve
>wa7isl
>

CW freqs: 1802 - 1805
3579
7050 - 7060

AM freqs 1885 - 1890
1945 - 1950
1990 - 1995
3880 - 3885

7290 - 7300
29000 - 29100

73...Mike VE3FGU

Mike & Lynda Toneri E-mail: toneri@ils.net
Keswick, Ontario
WEBPAGE: <http://www.geocities.com/heartland/meadows/8218>

Date: Sat, 3 Jan 1998 09:58:31 -0800
From: "Arden Allen" <aallen@sirius.com>
To: "Old Tube Radios" <boatanchors@theporch.com>
Subject: 51J4 / 70E15 PTO Problems
Message-ID: <199801031757.JAA18803@mail1.sirius.com>

Ah yes! The wonders of measurements.

If tube sustitution does not have a significant effect on voltage readings you are well advised to "don't fix it if it ain't broke" as all other indicators say things are ok.

I believe the reason for the apparent "frequency doubling" of the PTO output is due to the normal waveform distortion of an electron coupled oscillator's plate output. There is no tank circuit in the plate circuit to restore the ouput to a clean fundamental. Remember the oscillator is operating class C. The harmonics are "lost" in the mixer circuitry. You can see this with an oscilloscope. The PTO is probably just fine.

#4 is a bit of a mystery. Are you using a modulated test signal? Try making the frequency measurement with an unmodulated test signal. What freq would you measure when the S meter says the signal is centered in the IF passband?

Give your loved ones Gummy Bears.
Arden Allen KB6NAX Vallejo, CA aallen@sirius.com

Date: Sat, 3 Jan 1998 10:21:15 -0800 (PST)
From: Ken Gordon <keng@uidaho.edu>

To: Bill Riches <richesb@algorithms.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: T-350XM TRANSMITTER
Message-ID: <Pine.BSF.3.95.980103101837.10213D-100000@piobaire.mines.uidaho.edu>

> I am restoring a T350XM transmitter manufactured by Technical Radio
> Company, SanFrancisco, CA. It was built in 1945 under Contract NR
> W-36-039 SC17338. File # 27403 Phila 45-06 Serial 762. It may have come
> out of the Philadelphia Navy Yard. I have manuals and no parts problems
> - should have the rig on the air in a month. I wonder if any of you
> have any information on what and where this rig was used. I will be
> sending an article and pictures to Electric Radio. It can be classified
> a BA as it weighs 690 pounds. Any historical info would be appreciated.

The only historical note I might add is that I received mine, totally complete, and NIB from AFMARS when I was active in it about 20 years ago. It was an excellent transmitter. When I left the AFMARS program to leave my home town, I gave it to our AFMARS chief there in Missoula, Montana, since I felt that all MARS equipment was on loan to me and really didn't belong to me.

Sure wish I had another one.

Ken W7EKB

Date: Sat, 03 Jan 1998 13:49:35 -0800
From: Michael Hanz <AAFRadio@erols.com>
To: n4fs@monmouth.com
Cc: Old Tube Radios <boatanchors@sco.theporch.com>
Subject: Re: 51J4 / 70E15 PTO Problems
Message-ID: <34AEB26E.53@erols.com>

Mike B. Feher wrote:

> I would not be too concerned about the frequency doubling as measured on
> the counter. Unless you are certain that the PTO output is perfectly sine
> then the doubling could be simply due to a distorted waveform.

Mike is absolutely correct, and it's another good reason for owning an older Tek scope like a 540 series. There is a vertical output on the front panel that I leave tied to the HP counter on a permanent basis. That way you can not only adjust the amplitude of the waveform for optimum counting, but you get a sanity check on whichever part of the waveform it IS counting. That has saved me hours of work troubleshooting something that may not be wrong to start with!

73,
Mike Hanz
Herndon, VA
AAFRadio@erols.com

Date: Sat, 03 Jan 1998 12:39:56 +0000
From: Mary & Ray Jefferson <w7fni@micron.net>
To: boatanchors@theporch.com
Subject: KH Power supply and Rider Chanalyst
Message-ID: <34AE30C1.1A53@micron.net>

Greetings: I am in dire need of a schematic or manual for a KH Power Supply model UHR 220. Unit supplies zero to 500 volts and zero to 200 MA controlled by a variac on the front panel..This is a heavy duty, lab power supply and was sold about 1960. Has enough tubes in it to build a good receiver hi. Also need an instruction manual and schematic for old Riders Chanalyst...was manufactured by RCA and used in lots of radio service shops in fortys and fifties. Appreciate any help or suggestions.

Ray

Date: Sat, 3 Jan 1998 11:18:45 -0800 (PST)
From: "J. Herman" <jherman@sierra.net>
To: boatanchors@theporch.com, glowbugs@www.atl.org
Subject: Another component source
Message-ID: <Pine.SUN.3.95.980103110002.9604A-100000@diamond.sierra.net>

I just received the 500+ page Tech America catalog and recommend the builders on here get a copy.

One thing that caught my eye in the quartz crystal list was an xtal for 1843.2 kc (for \$2). Does anyone know the 160m band plan well enough to determine if that freq'y lands in one of the DX windows? If not, maybe we could make that the Glowbug/BA CW hangout.

Oh, the xtal comes packed in an HC49/U holder (heehee - the catalog calls that a "full-size" crystal!!), 13pF, 800 ohms.

There is no minimum order, so you can purchase say, a single resistor if you desire. Call 1-800-877-0072 for catalog/orders.

73, Jeff KH2 PZ / 7

Date: Sat, 03 Jan 1998 20:02:15 +2400
From: Bill Jarvis <B.H.Jarvis@hw.ac.uk>
To: boatanchors <boatanchors@theporch.com>
Subject: Surplus tubes
Message-ID: <199801032002.UAA26358@punt1.hw.ac.uk>

The following are BOXED, some with (obviously useless) guarantee.

A list to follow is for a similar assortment of USED, UNBOXED tubes in completely unknown condition (NONE are obviously faulty, NONE have caps missing or bases wobbling etc.)

Condition UNKNOWN and everything in the following table is TO THE BEST OF MY KNOWLEDGE AND BELIEF.

The Output Pentodes in particular would probably make good finals for up to 10 watts class C (NOT tried and tested in that application!).

The stabilisers would presumably help stabilise oscillator stages.

Enquiries welcome. If you want to know what POSTAGE would cost, please also say what you think is a reasonable price, allowing for the lack of any guarantee. (I just don't want to end up out of pocket.)

In the unlikely event of a rush for any particular type, best offer on first day secures.

Type Qty	Type	Qty	Vh	Ih	Va	Ia	Vsg	Isg	Vg	Ra	gm	bbp	r
6SN7	3	2tri	6.3	0.6	250.	9			-8.0	7k7	2.6	I0	31506
6BX7	4	2tri	6.3	1.5	250.	42				1k3	7.6	I0	22207
6060	3	2tri	6.3	0.3	250	10			-2	10	5.5	B9A	22413
ECC83	5	2tri	6.3	0.3	250	1.2			-2	62k5	1.6	B9A	22413
ECC33	1	2tri	6.3	0.4	250	9.0			-4	9k7	3.6	I0	12607
ECC82	1	2tri	6.3	0.3	250	10.5			-8.5	7k7	2.2	B9A	22413
EL360	3	open	6.3	1.27	100.	100	100.	7m.	-7.7	53kj	14	I0	43331
EL86	3	open	6.3	0.75	170.	70	170.	22m.	-12.5	23k	10	B9A	52531
EL41	1	open	6.3	0.7	250	36	250	5.2	-7	40k	10	B8A	14502
6F12	3	pen	6.3	0.3	250	10	250	2.5	-2	900k	7.5	B7G	11409
M8083	1	pen	6.3	0.3	250	10	250	2.5	-2	1000k	7.6	B7G	31117
EF42	1	pen	6.3	0.33	250	10	250	2.3	-2	440k	9.5	B8A	11417

E80F	1 pen	6.3	0.3	170	10	170	2.5	-2	400k	7.4	B9A 11505
6CB6	2 pen	6.3	0.3	200	9.5	150	2.8	-2	600k	6.2	B7G 20527

ME1403	4 tet	1.25	13mA.								wires
--------	-------	------	-------	--	--	--	--	--	--	--	-------

ME1401	2 tri	1.25	13mA.	9.	0.1m.			-2.5		.08	wires
ECH35	1 trihex	6.3	0.3	250	3.0	100	3.0	100	3.3	-2 1M3	.65 IO 10408

QS75/20	1					gas regulator, 75V, 20 mA max					B7G 21433
4687	3					gas regulator, 90-100; 130st, 10-40mA					IO 21416
85A2	7					gas regulator, 85 out, 125 strike					B7G 11609
150B2	3					gas regulator, 143-147, 180 in, 5-15 m					B7G 21324
2D21	4 gtet	6.3	0.6	400pk		Gas tetrode relay					B7G 21422

90CV						photocell					B7G
------	--	--	--	--	--	-----------	--	--	--	--	-----

Very best for '98 -

Bill, aka maestro@cix.co.uk.

GM8APX, qthr=No 6, EH4 6JY==Cave felem==No Rectangulars=Ikke Hawkering

Cantabit vacuus coram latrone viator

Net-Tamer V 1.10 - Registered

Date: Fri, 2 Jan 1998 12:45:59 -0800
From: "larry W6WUH" <rau@wco.com>
To: <B.H.Jarvis@hw.ac.uk>
Cc: "boatanchors" <boatanchors@theporch.com>
Subject: ax9909 AES
Message-ID: <199801032003.MAA23904@shell.wco.com>

just plain capatalist speculation.. and in this case for an item for which
there is a small supply but an even smaller demand...

maybe i made the thing worse by writing an article about the only radio
that uses the darn things !

Date: Sat, 3 Jan 1998 12:35:53 -0800
From: "larry W6WUH" <rau@wco.com>
To: "boatanchors" <boatanchors@theporch.com>
Subject: W6WUH Outta Town

Message-ID: <199801032037.MAA02097@shell.wco.com>

Howdy gang... gotta go outta town...so if you are expecting anything from me... like free xtals etc...have no fear i will tend to all obligations when i return from Tuscon Az. Jan 12

See you at Liver more Tomorrow and on 6m for Vhf Contest in one week from the top of mount Idunno in Az.

sorry for any delays.. but life got in the way of radio once again.

73 ofr the new year

Larry Rau W6WUH
P.O. Box 1139
Occidental Ca. 95465

Date: Sat, 3 Jan 1998 12:39:12 -0800
From: "larry W6WUH" <rau@wco.com>
To: "boatanchors" <boatanchors@theporch.com>
Subject: Al Culbert
Message-ID: <199801032041.MAA02720@shell.wco.com>

Sorry for personal eamil but lost address

Al.. I was mistook.. I have the G-66 reciver manual not the xmtr manual..
what do i owe you ?

send email adress

larry w6WUH

Date: Sat, 3 Jan 1998 14:47:36 -0600 (CST)
From: arc5@ix.netcom.com
To: boatanchors@sco.theporch.com
Subject: SAN ANTONIO FEST
Message-ID: <199813144720741@>

Can someone give me the details/directions to
the San Antonio, Texas hamfest on the 10th?
Thanks and 73
Dave AB5S

Date: Sat, 03 Jan 1998 16:40:47 -0500
From: Al Klase <skywaves@bw.webex.net>
To: Boatanchors <boatanchors@theporch.com>
Subject: RE: Regen Receiver Design
Message-ID: <34AEB05F.1FDC901B@bw.webex.net>

Charles and The Group,

Regarding audio coupling in regen receivers: Early ham receivers using triodes for both the detector and (single) audio stage generally used transformer coupling. Because the voltage gain of triodes is low, a high turns ratio was used to realize additional voltage gain without using an extra tube. My 1929 handbook suggests 6:1 or 9:1. (Actually, I like to think of this as 1:6 or 1:9 as they're connected to step up the signal voltage.)

Pentodes have much higher plate impedances than triodes and used coupling networks with multi-hundred-henry inductors as the plate load. This produces maximum audio voltage gain through the detector. Transformers with sufficiently high impedances were generally not available. It was common practice to wire the primary and secondary of an audio transformer in series as a substitute for the inductor. With this sort of coupling, a single triode is all the audio amplification required for headphone use.

The National S-101 Screen Grid Detector Coupling Unit contained a 700 henry plate choke, a .01 uF coupling cap, and a 250K grid resistor. It claimed "two to three times as much amplification as resistance coupling."

In the twenties and even on through the thirties, regen receivers, even when AC power was available, were often operated from batteries in the interest of voltage stability and lack of hum. Therefore the number of tubes was generally held to a minimum. If a higher gain AF amplifier is used, RC coupling may be used effectively with both triode and pentode detectors.

BTW, I think you'll find it helpful to use a regulated B supply with any regenerative circuit.

Hope this helps,
73,
Al

Charles M Cheney wrote:

>
> Happy New Year!
>
> I am trying to build the 2-tube regen in the 1937 ARRL handbook. It uses
> an interstage transformer described as a UTC Type CS1. I would like to
> get the specs for this transformer so I can find a substitute.
>
> Also, a lot of the old designs for regen receivers use very high value
> chokes (several hundred henrys)....

--

Al Klase - N3FRQ
skywaves@bw.webex.net
Flemington, NJ 08822
Web Page: <http://www.webex.net/~skywaves/home.htm>

Date: Sat, 3 Jan 1998 12:52:11 -0600 (CST)
From: Spencer Petri <spetri@e-tex.com>
To: boatanchors@theporch.com
Subject: Today's Dallas Sidewalk Sale
Message-ID: <199801031852.MAA06297@sco.theporch.com>

Hello Bargain Barterer's,

Pretty slim pickin's today. Fewer vendors this time around. Looked like it could rain cats and dogs any second. Came home with a tube tester in an oak, finger jointed, cabinet. Model 324, made by Radio City Products Co., Inc. It tests 4,5,6,7,8 pin tubes. Also loctal, 7 & 9 pin minatures AND inline and circular pin subminatures. Pretty interesting device in good shape for \$20 and the BA aroma is worth that (the cabinet has been liberally oiled).

First one of these I've seen. Anybody else use or have one of'em?

Good hunting,

73 de Pete WA5JCI EM21 "the future will be better tomorrow"

.....
6 Mtr -- WAS #490, WAC CW, DXCC/91 Countries, VUCC #361/626 Grids
.....
2 Mtr -- 36 States -- VUCC #346/183 Grids

End of BOATANCHORS Digest 1862

>From ???@??? Sun Jan 04 01:45:49 1998
Message-Id: <199801032106.PAA11957@sco.theporch.com>
Date: Sat, 3 Jan 1998 15:06:43 CST
Subject: BOATANCHORS digest 1863

BOATANCHORS Digest 1863

Topics covered in this issue include:

- 1) RE: mic. connectors
by JONWEINER <JONWEINER@aol.com>
- 2) Re: Regen rcvr design
by Ho4bart <Ho4bart@aol.com>
- 3) Looking for an EL32
by Andre Guibert <aguibert@sympatico.ca>
- 4) Re: KH Power supply and Rider Chanalyst
by Edward Zeranski <ejz@nosc.mil>
- 5) Re: Another component source
by Ho4bart <Ho4bart@aol.com>
- 6) Santee Swap...Oh Well..
by Edward Zeranski <ejz@nosc.mil>
- 7) riveted ground lugs
by "J. Herman" <jherman@sierra.net>
- 8) RCA KB-2C "Bantam Velocity" Broadcast Ribbon Mic FS/Trade
by Allen Tucholski <allent@en.com>
- 9) More tubes
by Bill Jarvis <B.H.Jarvis@hw.ac.uk>
- 10) AR7 woes
by Morris Odell <morriso@vifp.monash.edu.au>
- 11) Tube Dreams
by gpewitt@execpc.com
- 12) Is This a SW-3? (long)
by "D. Ragsdale" <doragsda@polymail.cpunix.calpoly.edu>
- 13) Re: GRC-109 tx at FR
by Bob Roehrig <broehrig@admin.aurora.edu>
- 14) B&W, Heath, SICO, misc for sale
by "Robert A. Sullivan" <bobs@isquare.com>
- 15) Re: Is This a SW-3? (long)
by John Dilks <oldradio@worldnet.att.net>
- 16) Re: Another component source
by Bob Roehrig <broehrig@admin.aurora.edu>
- 17) Re: Is This a SW-3? (long)
by Al Klase <skywaves@bw.webex.net>
- 18) Re: Tube Dreams
by Bob Roehrig <broehrig@admin.aurora.edu>
- 19) Re: GRC-109 tx at FR

by bdhall@ghg.net (Benjamin D. Hall)
20) Re: Fw: Silicone Grease on Ceramic
by "Barry L. Ornitz" <ornitz@tricon.net>
21) A Visit To The Castle
by Dick Dillman <ddillman@igc.apc.org>

Date: Sat, 3 Jan 1998 16:43:45 EST
From: JONWEINER <JONWEINER@aol.com>
To: boatanchors@theporch.com
Subject: RE: mic. connectors
Message-ID: <18f018c6.34aeb114@aol.com>

A couple of weeks ago, I ran across several of the rare two pin Amphenol mic. connectors (for Heathkit, B&W, Hallicrafters, Central Electronics, etc.) which I bought for \$3. each. I was able to sell them all to members of this group for \$5., including packing and shipping (had to buy padded envelopes at 85 cents ea. plus postage). I've got several for myself, but know many members have been looking for them.

Today at the Morristown, TN hamfest, I bought more of them from the same fellow. Same deal. If anyone needs them, send me a \$5. bill (or \$8. for two). Supply is limited, but I did get more than last time. Please e-mail me to let me know that you want them, and how many you want.

73's, Jon

Jon Weiner
113 Valley Oak Drive
Greenville, SC 29617

Date: Sat, 3 Jan 1998 16:53:33 EST
From: Ho4bart <Ho4bart@aol.com>
To: boatanchors@theporch.com
Subject: Re: Regen rcvr design
Message-ID: <af05fd2.34aeb361@aol.com>

In a message dated 98-01-03 08:01:21 EST, aa1hb@juno.com writes:

> I am trying to build the 2-tube regen in the 1937 ARRL handbook. It uses
> an interstage transformer described as a UTC Type CS1. I would like to
> get the specs for this transformer so I can find a substitute.

--most of the old designs simply called for a 1:3 interstage transformer instead
of specifying a particular part number. looking at antique radio swaps and

asking
about an audio interstage transformer will get you some responses. you just
don't
probably want one from a 20s battery radio as that might not take the plate
current
and might be overpriced for what you need.

>
> Also, a lot of the old designs for regen receivers use very high value
> chokes (several hundred henrys) in the audio output. Some designs also
> use devices they refer to as "audio couplers" which consist of a high
> value choke, a resistor, and a cap. These also appear to be unobtainium.
> I have never seen these chokes or audio couplers even at flea markets.
> Can anyone suggest a source or a substitute?

--maybe this would suffice for the choke: ask at swapmeets about a
"microphone to grid matching transformer " and then just use the
secondary as the choke. these won't take much current. you can figure
the wire in these is going to be 38-40 gauge or so. i don't know how
much current #40 wire will take. this idea will work for the battery powered
regens no problem, the ones with 45-90 volts on the plate and very small
plate current. i would just hesitate a moment before applying it to
a detector with 200+ jolts on the plate. perhaps another reader can tell us
how much current this small wire will stand. actually the regen detector
only draws typically an mA or several, but i would want to know that under
all conditions from no regen (practically zero bias) to full oscillation,
the
maximum plate current.

if this transformer winding will work, the rest is a piece of cake, the grid
resistor
is just 500k or a megohm, and a ceramic disk capacitor to couple the two.

try to get one of the old style vernier dials too, and old style pointer knobs
for the other controls.
happy building! hue

Date: Sat, 3 Jan 1998 16:55:46 -0500 (EST)
From: Andre Guibert <aguibert@sympatico.ca>
To: boatanchors@theporch.com
Subject: Looking for an EL32
Message-ID: <199801032155.QAA12601@smtp11.bellglobal.com>

Bonsoir to all

Anybody would have an EL32 in the deep end of the
treasure pile or is it just a dim memory for some

of you.

It would make me more secure as a backup for one of
offbeat boatanchor.

Andre

Date: Sat, 03 Jan 1998 14:08:00 -0800
From: Edward Zeranski <ejz@nosc.mil>
To: w7fni@micron.net
Cc: boatanchors@theporch.com
Subject: Re: KH Power supply and Rider Chanalyst
Message-ID: <3.0.1.32.19980103140800.00c12e78@marlin.nosc.mil>

Also need an instruction manual and schematic for
>old Riders Chanalyst...was manufactured by RCA and used in lots of radio
>service shops in fortys and fifties. Appreciate any help or
>suggestions.

>

>Ray

Ray,

Have both RF/IF and Audio Chanalysts. Can send a manual for copy and post
fee if a real manual doesn't show up. Also, can copy a color ad from
'Service' magazine for the RCA-Ryder Chanalyst when it was new. There are
other BA folk with the sets.

Ed Zeranski This is a private opinion or statement.
home email: ezeran@cris.com

Date: Sat, 3 Jan 1998 17:14:27 EST
From: Ho4bart <Ho4bart@aol.com>
To: jherman@sierra.net, boatanchors@theporch.com
Subject: Re: Another component source
Message-ID: <5bed631f.34aeb846@aol.com>

In a message dated 98-01-03 14:29:36 EST, jherman@sierra.net writes:

> Oh, the xtal comes packed in an HC49/U holder (heehee - the catalog
> calls that a "full-size" crystal!!), 13pF, 800 ohms.

>

what's this about? i don't think i've ever seen a quartz listed with an
impedance in a catalog.

hue

Date: Sat, 03 Jan 1998 14:44:45 -0800
From: Edward Zeranski <ejz@nosc.mil>
To: boatanchors@theporch.com
Subject: Santee Swap...Oh Well..
Message-ID: <3.0.1.32.19980103144445.006bb92c@marlin.nosc.mil>

Well, not much of a showing 'cause of threatened/promised rain.(promised because we live in a dry land) Did see some Drakes and a few bits here and there but my only find was an R390A sized cabinet for \$10. Got to have a yak with Listmember John Kolb and pass along the TV-10 manual for copying. Mike McGinnis N6TYF, see DEC 97 ER pg 16, came by also. Damn rain, there wasn't any, "El Nino" did it. Will try again next month to attract BA folk. By the way.....Doug WA6VOV and the T-784/GRC-109 have been working Japan and Europe from San Diego on 17M..built in key, CW Crystals x2 xtals, out the window dipole on RG59 @ 20 ft. Guess that one is on 'long term loan'.

Ed Zeranski This is a private opinion or statement.
home email: ezeran@cris.com

Date: Sat, 3 Jan 1998 14:35:36 -0800 (PST)
From: "J. Herman" <jherman@sierra.net>
To: boatanchors@theporch.com
Subject: riveted ground lugs
Message-ID: <Pine.SUN.3.95.980103141638.20810A-100000@diamond.sierra.net>

I noticed none of the filaments nor the dial lamps for my Galaxy lit up. The PS's 12.6vac line showed no problems, so I removed the rig's bottom cover. I immediately saw the possible problem - the ground lead from the power connector went to a ground lug that was riveted to the chassis. I attached a screw-on ground lug to the nearest through-chassis screw, and resoldered the connector to it. Upon power up, everything lit up as it should.

I'm now struck with just how many rivets are used in this rig (never took notice before); every terminal strip and tube socket is riveted to the chassis. I'm going to redo every lead that's attached to one of these riveted joints. (Galaxy should have known better than to use rivets!!)

One great worry: Did I shorten tube life by having B+ applied but no filament voltage? I'd say at least one minute went by before I turned off the rig. (The Galaxy GT-550's PS is SS, so B+ was immediately applied - there's no warm-up - B+ is **not** gradually increased).

73, Jeff KH2 PZ / 7

Date: Sat, 03 Jan 1998 18:31:46 -0500
From: Allen Tucholski <allent@en.com>
To: boatanchors@theporch.com
Subject: RCA KB-2C "Bantam Velocity" Broadcast Ribbon Mic FS/Trade
Message-ID: <2.2.32.19980103233146.00c3ea28@en.com>

Hello all microphone collectors!

I have the RCA MI-11001 this is the broadcast, KB-2C "Bantam Velocity" Ribbon microphone.
It is in good condition. It can be hooked up for 50, 150 or 250 ohms. Has a slotted screw to change from Voice or Music.

There is a Jpg picture of this at <http://www.en.com/users/allent/rca.jpg>

I am looking for one of the following..
First choice would be the Shure Ribbon Model 333.
Second choice would be the Classic Shure Unidyne Models 55 or 556 mics.
Third would be the E-V or Shure dynamics.

What do you have?

Allen

Date: Sat, 03 Jan 1998 23:53:35 +2400
From: Bill Jarvis <B.H.Jarvis@hw.ac.uk>
To: boatanchors <boatanchors@theporch.com>
Subject: More tubes
Message-ID: <199801032353.XAA26596@punt1.hw.ac.uk>

Following that list of boxed tubes, I'd like to dispose of the following. These are NOT boxed but all APPEAR to be OK. As soon as anyone signals interest I'll find out cost of postage and invite you to add a small

amount for packing and to make sure I don't lose out. In the unlikely event of more than one person offering for one item, it will go to the best offer on Day 1 of any offers.

Before the list, here's a query: Found one which might be collectable: miniature Hivac screen-grid with 4-pin base and top cap anode. Labelled HIVACXSG2.0V so I guess it has a 2 V filament. Anyone oblige with any information please?

The list (just coming) includes a PFL200 which I've seen mentioned recently but I can't find it in any book. Again, info welcome.

Here's the list, with what data I can find but only on the not too common types:

Type	Vh	Ih	Va	Ia	Vsg	Isg	Vg	Ra	gm	Base	
12FQ8	lots	12.6	.15	250	1.5	splitanodes	-1.5	76k	1.25	B9A	
						(made specially for Wurlitzer Organ Co)					
6D6		6.3	.3	250	8.2	100	2.0	-3	800k	1.6	UX6
6K6		6.3	.4	315	28	250	9.0	-21	75k	2.1 4W 15%	O/P
6SK7		6.3	.3	250	9.2	100	2.6	-3	800k	2	IO

EAF42 EB34 ECC83 ECC86 ECL80 EF37A EF41 EF80 EF85 EZ80 6V types

GZ32 rectifier

KT33	26	.3	200	60	200	10	-13.2		10	5w	8%	IO
------	----	----	-----	----	-----	----	-------	--	----	----	----	----

PC88	3.6	0.3	160	12.5				4k7	14		B9A
------	-----	-----	-----	------	--	--	--	-----	----	--	-----

PC97 PCC89 PCF86 PCL82 PFL200 PL504 PY88: TV types, 0.3 V chain, some rare.

UY41 VR150 VU71

Further details for SOME of the above on request; can't find them all.

A few visually LIKE some of the above but no decipherable label.

Thanks in anticipation of any replies, comments, offers. SWAP suggestions always welcome - 30 W PP O/P transformer badly needed if I can afford the carriage. Magic eyes, small CRTs, slide rules, wideband wavemeter (GDO type), etc, etc.....

Seasons' Greetings; Happy 98 -

Bill, aka maestro@cix.co.uk.

GM8APX, qthr=No 6, EH4 6JY==Cave felem==No Rectangulars=Ikke Hawkering

Memoria minuitur, nisi eam exerceas

Net-Tamer V 1.10 - Registered

Date: Sun, 04 Jan 1998 10:57:58 +1100
From: Morris Odell <morriso@vifp.monash.edu.au>
To: boatanchors@sco.theporch.com
Subject: AR7 woes
Message-ID: <34AED086.3B92@vifp.monash.edu.au>

Hi all,

Thanks to all those too numerous to reply to personally, who made suggestions re the AR7 oscillator. As it turned out it was due to a dirty tuning cap rotor wiper. After being squirted with CRC contact cleaner it settled down nicely. The set is working well now although SSB detection is pretty painful requiring more RF gain juggling than I have ever experienced in any old receiver. The BFO injection level is extremely low so maybe a new BFO tube (which is on the way) will help.

One interesting thing that I found was that the plate winding for the 2nd RF amplifier (a 6U7G) in the broadcast band coil box was open. The set still received the BC band remarkably well!! In fact I only found this by accident when checking voltages. On opening the coil box I found a rather confusing layout. There was the slug tuned secondary for the mixer grid with a parallel trimmer as advertised. The RF amp plate coil was a large pancake winding quite a long way from it (about one inch) on the core. A small winding was wound over the grid coil and one end was connected to the plate terminal, the other end was unterminated. At first I thought this was a coil box that had been mangled by a previous owner but then I realised that the small winding may have been meant as a "gimmick" coupling capacitor. The pancake plate winding was irretrievably open alas, so I bridged it with a 2.5 mh RF choke. This had the effect of restoring plate voltage to the 6U7 with an ENORMOUS increase in sensitivity! So there it was - the radio worked quite acceptably on the broadcast band with no plate volts on the 2nd RF amp and only pretty minimal capacitive coupling!!

These old sets never cease to amaze me!

73 de Morris VK3DOC

Date: Sat, 3 Jan 98 18:34:59 PST
From: gpewitt@execpc.com
To: boatanchors@listserv.tempe.gov, boatanchors@theporch.com
Subject: Tube Dreams
Message-ID: <Chameleon.980103190042.gpewitt@execpc.com>

Anyone ever speculate about how tubes might have developed if transistors had never been invented? I am sure the trend toward smaller lower voltage receiving tubes would have continued. Cold cathode tubes would have drawn less current, produced less heat, and lasted much longer. The Compactron tubes suggest a movement in the direction of multiple circuits in a single enclosure. I can envision photo reduction masks being used to etch hundreds or thousands of pin head size cathodes and plates on metal strata. Multiple layers allowing grids and beam directors. I doubt that they would have looked much like conventional tubes. Probably flat rectangular metal boxes with hundreds of pins on the bottom and fins on the top. Sound familiar? The chips (or cans?, tubs? or dare I say integrated circuits?) would probably contained complete sub assemblies or entire radios. Frequency synthesizers, phase locked loops, audio amps, etc.. There's really no reason it couldn't still be done. The tube manufactures tried with the Nuvistors and such but didn't really change their paradymes. They were still thinking single unit analog devices with higher voltages and currents. The techniques used for solid state devices would have worked just as well for vacuum technology. It might not have reached the level of large scale integration needed for personal computers but who knows? Sort of like what might have happened if steam powered cars had won out over internal combustion engined vehicles. We wouldn't be driving crude Stanly steamers but sophisticated steam turbines. I sure would like to have a new Hammarlund HQ-1800 with 4 "cans" synchronous detection, phase locked loop, frequency synthesized tuning, etc. I'm sure some of our better educated list members could think of developments far beyond my efforts.
73 and happy dreams. Gary

Name: Gary Pewitt N9ZSV/KT
6120 W. Calumet Rd. Apt 204
Milwaukee, WI 53223
414 355 8147 Home 414 297 4307 Work
E-mail: gpewitt@execpc.com

Date: 01/03/98

Time: 18:34:59

Date: Sat, 3 Jan 1998 16:59:27 -0800 (PST)

From: "D. Ragsdale" <doragsda@polymail.cpunix.calpoly.edu>

To: boatanchors@theporch.com

Subject: Is This a SW-3? (long)

Message-ID: <199801040059.QAA13400@rubens.artisan.calpoly.edu>

I swung by a local antique shop this afternoon to look for a kitchen table for my wife, and there on the "radio table" next to a grossly overpriced Halli S-38B and under a moderately overpriced Transoceanic (rough H500), was what I'm pretty sure is a National SW-3. The owner promptly told me it was some sort of receiver converter because of the four prong plug on the end of the cable that he thought must plug into a tube socket on another receiver (he didn't have the doghouse supply). Left the shop with the radio and a new in box Western Electric 205D baseball tube. I want to make sure this is a SW-3, since it doesn't have a model stamped on it and I know there were clones made in the 30's, so here is a description, if any of you National experts can set me straight, I'd appreciate it:

Sitting looking at the front of the radio - the metal cabinet is 9.75" W by 7.25" H by 9.125" Deep.

Center front has the classic national dial. Left and right lower front has two knobs. Center front below tuning dial has edge mounted dial with numbers on it (mounted horizontal).

Hinged top. Three separate "compartments" inside. Left front has shielded 58 tube with coil in front of it (60-A coil). Coil attaches to grid cap on tube, out of coil base there is a wire that attaches to a ground connection up high on the metal compartment shield with a grid clip.

Center compartment is "T" shaped, two gang tuning cap in middle, dial light at top of dial, back of compartment in center is National Audio Transformer S-101. Left of this are the antenna and grd. connections. Right side has two output connections (all binding posts) and a 27 tube.

Right compartment has coil in back (60-A again) with what looks like a ceramic trimmer cap on top of coil. Connects to grid cap of another 58 tube (unshielded). In bottom of the compartment is an old flat cap with a grid

leak soldered on top of it, this has another wire that comes up to another ground connection via a grid clip near the top of the compartment separator.

Cable comes out the lower back of the radio and terminates in a 4 prong male plug.

Does this sound like a SW-3? Anyone have a spare doghouse supply (laugh of the day!), barring that, can someone tell me what voltages it needs? Also, what range are the 60-A coils for? Thanks for any help on this one, gang.

73
Dave
KF6BOM

David Ragsdale
doragsda@oboe.calpoly.edu

Date: Sat, 3 Jan 1998 19:05:46 -0600 (CST)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: "J. Herman" <jherman@sierra.net>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: GRC-109 tx at FR
Message-ID: <Pine.ULT.3.96.980103190424.3788B-1000000@admin.aurora.edu>

On Sat, 3 Jan 1998, J. Herman wrote:

> Email 'em, Ben! fairradio@alpha.wcoil.com, or take a peek at their
> homepage: <http://alpha.wcoil.com/~fairradio/>
> They're very prompt in replying.

This is true, but if you make an order, expect a long wait. Their shipping dept must be VERY small. I ordered one several weeks ago and they just shipped it yesterday.

"Nostalgia is a thing of the past"
E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

Date: Sat, 03 Jan 1998 20:10:23 -0500
From: "Robert A. Sullivan" <bobs@isquare.com>
To: boatanchors@theporch.com

Subject: B&W, Heath, SICO, misc for sale
Message-ID: <3.0.3.32.19980103201023.006af11c@mail.wizard.net>

Listmates,

I have a few items someone may be interested in. Any reasonable offer is welcomed:

B&W Model 600 Grid Dip meter (this is the one with the acorn tube). It's beautiful but I only have one coil - for 14-36Mhz. Sorry, no manual but doesn't everyone over the age of 40 know how to use a dipper?

Heath IG-37 FM-Stereo Generator. Works fine but no manual

For any VTVM collectors out there all these work and look pretty good.

Heath IM-13 with probe but no manual
SICO 670-A, no manual, no DC probe
SICO 77, no manual, no DC probe
Electronics Designs Model 100, no probe, no manual

I am looking for a pair of 813's and sockets.

73,
Bob Sullivan
W0YVA

++++
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Date: Sat, 03 Jan 1998 20:16:00 -0500
From: John Dilks <oldradio@worldnet.att.net>
To: doragsda@polymail.cpunix.calpoly.edu
Cc: boatanchors@theporch.com
Subject: Re: Is This a SW-3? (long)
Message-ID: <34AEE2D0.361B@worldnet.att.net>

David,

Yes Virginia, there is a Santa Clause.

You did it! Great find. Nice extra tube too!

My SW-3 info is put away, but you can get coils and coil forms from James Fred who advertises in the ARC. Your's is a bandspread type coil. Most likely on a ham band.

If I were you, I'd take the wife out antiquing more often (at least untill she catches on.)

73' John Dilks, K2TQN

D. Ragsdale wrote:

>
> I swung by a local antique shop this afternoon to look for a kitchen table
> for my wife, and there on the "radio table" next to a grossly overpriced
> Halli S-38B and under a moderately overpriced Transoceanic (rough H500), was
> what I'm pretty sure is a National SW-3. -snip-
> Left the shop with the radio and a
> new in box Western Electric 205D baseball tube. I want to make sure this is
> a SW-3, since it doesn't have a model stamped on it and I know there were
> clones made in the 30's, so here is a description, if any of you National
> experts can set me straight, I'd appreciate it:
>

Date: Sat, 3 Jan 1998 19:23:37 -0600 (CST)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Ho4bart <Ho4bart@aol.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Another component source
Message-ID: <Pine.ULT.3.96.980103192221.3788C-1000000@admin.aurora.edu>

On Sat, 3 Jan 1998, Ho4bart wrote:

> what's this about? i don't think i've ever seen a quartz listed with an
> impedance in a catalog.

Most xtal mfrs list the ESR (equivalent series resistance) and drive level in milliwatts for their xtals somewhere in the literature.

"Nostalgia is a thing of the past"
E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI

CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

Date: Sat, 03 Jan 1998 20:36:31 -0500
From: Al Klase <skywaves@bw.webex.net>
To: doragsda@polymail.cpunix.calpoly.edu
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Is This a SW-3? (long)
Message-ID: <34AEE79F.6DEFF97D@bw.webex.net>

Dave and The Group,

If it's not an SW-3 it's a hell of a copy. If it says "OK" on the inside of the lid in orange grease pencil, don't rub it off, it's the original National inspection mark. The 60-A coil is the ten meter band-spread job. (Not much fun at this point in the sunspot cycle.) The power supply should provide 2.5 VAC and 180 VDC. I don't have a PS schematic handy, but I think the 2.5 volt heater winding had a center tap to ground. You may get hum without this. This radio probably has papercapitus. Think about replacing them. Coils or even forms may be a problem unless someone decides to be really kind.

73,
Al

D. Ragsdale wrote:

>

> I swung by a local antique shop this afternoon to look for a kitchen table
> for my wife, and there on the "radio table" next to a grossly overpriced
> Halli S-38B and under a moderately overpriced Transoceanic (rough H500), was
> what I'm pretty sure is a National SW-3.....

>

--

Al Klase - N3FRQ
skywaves@bw.webex.net
Flemington, NJ 08822
Web Page: <http://www.webex.net/~skywaves/home.htm>

Date: Sat, 3 Jan 1998 19:36:56 -0600 (CST)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: gpewitt@execpc.com

Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Tube Dreams
Message-ID: <Pine.ULT.3.96.980103193319.3788E-100000@admin.aurora.edu>

On Sat, 3 Jan 1998 gpewitt@execpc.com wrote:

> Anyone ever speculate about how tubes might have developed if
> transistors had never been invented?
>The Compactron tubes suggest a movement
> in the direction of multiple circuits in a single enclosure.

I dislike those darned Compracron jobs. I can take dual triodes,
dual diodes and such but packing several "devices" into one
envelope always leads to one of the stages going bad and having to
replace the whole thing as a result.

"Nostalgia is a thing of the past"
E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-5530

Date: Sat, 03 Jan 1998 19:44:52 -0600
From: bdhall@ghg.net (Benjamin D. Hall)
To: broehrig@admin.aurora.edu, Old Tube Radios <boatanchors@theporch.com>
Subject: Re: GRC-109 tx at FR
Message-ID: <3.0.32.19980103193952.006f9c20@mailman.ghgcorp.com>

>This is true, but if you make an order, expect a long wait. Their
>shipping dept must be VERY small. I ordered one several weeks ago
>and they just shipped it yesterday.

I talked with Phil Sellati a couple of days ago, and he says they are
really backed up. Sadly, my field phone (Yule present to myself) won't be
here for another week, eck...

73,
Ben

Benjamin D. Hall, KD5BYB, Engine and radio collector / operator.
Located in Houston, Texas, USA.
e-mail: BDHall@ghg.net, web: <http://www.ghgcorp.com/bdhall>.
"An ye harm none, do what ye will."

Date: Sat, 3 Jan 1998 20:39:51 -0500
From: "Barry L. Ornitz" <ornitz@tricon.net>
To: "Gary Gitzen" <garyg@cup.hp.com>
Cc: "Boatanchors Mailing List" <boatanchors@sco.theporch.com>
Subject: Re: Fw: Silicone Grease on Ceramic
Message-ID: <01bd18b1\$cd8eae80\$707fb0cc@ornitz.tricon.net>

Hi Gary,

You wrote about WD-40:

>Exactly why I rarely use the stuff. Even when it does "lube", it goes away.

>Hmmm..... implies a bit of heat could speed things up? Will it
>really help after the solvents go away?

WD-40 contains about a third light mineral oil. This does some lubrication, but its viscosity is low and it does not lubricate nearly as well as motor oil. Gentle heating will evaporate the WD-40's kerosene faster, but the mineral oil also evaporates much faster than does heavier oils.

>OK, unglazed is the dull surface I think I remember seeing on some very
>old coil forms and some of my daughter's art projects, as opposed to
>the shiny glass_like surface?

Correct. Glazing refers to a glass topcoat that is applied as the last step in multiple firings of ceramic. It makes a shiny, waterproof surface, but it is structurally weak and chips off easily. Look at a glazed standoff insulator carefully and note that the holes with threads are not glazed. If they were, tightening the screw would chip it off.

>Please educate me (and the BA list too?) I remember "TV Tuner Sprays"
>which picked up gunk and dust which eventually seriously eroded
>contact surfaces? I _think_ it may have contained silicone(s), but
>memory [Duh! What's that?] is a bit weak in my "Senior Moments".

The old tuner sprays were generally a mixture of Freon-TF and a few percent of silicone oil (polysiloxane). Much like WD-40 in principle, the Freon-TF dissolved old grease and washed it out (if done properly!). The silicone grease left behind was a lubricant, that unlike mineral oil, had an extremely low vapor pressure. It basically did not evaporate.

In cleaning old tuners and such, it often took quite a bit of liquid to do the job. This could lead to the buildup of silicone oil which attracted and held dust and dirt eventually causing the problems you note. What should have been done was use just Freon-TF or a mixture of TF with alcohol to clean all the old grease out first. Then a quick shot of the TF with the silicone would have provided all the lubrication needed. Unfortunately, most people were in a hurry and they did not do the two-step method. They

usually paid for this eventually!

>The can of Deoxit-D5 which rescued my R-390A a few years ago appears
>to contain a solvent (naptha, lighter fluid) and "D100L", whatever
>that might be. No mention is made of "silicone".
>Will this Deoxit also attract some of those nasty dusty thingys and
>erode those 30-40 year old contacts? Should I respray on a regular
>basis to wash them off? I really want that R-390A to be a lifetime
>companion. That's hopefully 20-25+ years.

Caig makes a number of products, and their MSDS information only mentions "proprietary ingredients" with the statement that no known hazards exist with them. To me, this could imply either mineral oil or a light silicone oil. Much depends on the solvent used. For example, the Deoxit bottle I had 30 years ago contained TF and a silicone oil. But with the banning of TF in most applications, I am sure they have changed their formulation. Freon-TF is one of the few materials that dissolves silicone greases quickly with high solubility. Without the TF, I suspect they have probably changed the lubricant slightly. I wonder if Caig adds anything like TBHQ, or BHA, or even Vitamin E as antioxidants (these are respectively tetrabutyl hydroquinone, butylated hydroxyanisole, and tocopherol)?

As to your question, note what I said above. Silicone grease will attract dust if it is too heavy, so DON'T respray on a regular basis. If you must, use a cleaning spray to remove the old grease and dirt first, followed by a LIGHT application of the Caig products. Like many of use on Boatanchors, I like the Caig products, but they are expensive. But used properly, a little goes a LONG way. Using it in excess is asking for eventual trouble.

>Hmmm..... is the solvent in the spray just to cut any heavy petro
>based oils or greases which have dried out after collecting unknown
>quantities of grit and crud?

That is part of their purpose. The other part is to dilute the heavier mineral (or silicone) oil such that it flows more readily into small cracks.

>Silicone grease is very high viscosity stuff. How does it differ
>from the light "Silicone" dissolved(?) in petrol solvents, when it
>supposedly takes HF or similar and other very_nasty stuff to
>cut silicone grease?

Gary, you need to promise that I did not "feed" you these questions! :-)

Even heavy silicone oil will dissolve slightly in organic solvents. The lighter (lower molecular weight, shorter chain length) oils, of course, dissolve more readily. But even silicone greases heavier than "transistor heat sink" grease will dissolve readily in Freon-TF. It is too bad that TF is so difficult to get today. Some of the fluor-chloro- replacements do a

fair job of dissolving silicones, but they also dissolve many plastics and paints too. Depending on the surface, hydrofluoric acid may be the only choice. However in many cases, potassium hydroxide solution will remove silicone after soaking for several hours.

>I used to (successfully???) wash silicone grease out of blue_jeans in
>the washer, I think. Maybe it just got redistributed, but I never
>noticed it affecting my eyes from hands touching.

My guess is that it got redistributed. Consider this a poor-man's Scotchguard treatment! :-)

>Will the stuff
>weather away somewhat quickly, or is it really good for many years?
>How does it react to UV here in sunny Kalifornia?

Higher molecular weight silicones will hang around a LONG time. Their vapor pressure is extremely low. This is why they are often used to seal joints in high vacuum systems. I do not have any references at home on ozone or ultraviolet attack on silicones, but I look when I get to my office Monday. My guess is that silicones will far outlast conventional lubricating oils.

>Gary, Silly Cone Valley Kalifornia

An interesting place. The last time I was in San Jose, I spent a little free time in Alltronics (buying mainly parts and chatting with the manager). But the best place I visited was the book store at Stanford. Absolutely wonderful - one of the biggest collections of electronics books I have ever seen - with everything state-of-the-art.

73, Barry L. Ornitz WA4VZQ ornitz@tricon.net

Date: Sat, 3 Jan 1998 18:02:19 -0800 (PST)
From: Dick Dillman <ddillman@igc.apc.org>
To: boatanchors@theporch.com, Whispell@aol.com, dlroske@juno.com,
jparnell@igc.org
Subject: A Visit To The Castle
Message-ID: <2.2.16.19980103180011.399f5120@pop.igc.org>

Remember that closing scene in "Citizen Kane", the one in which Rosebud is committed to the flames? It starts with a fairly close shot but the camera keeps pulling back and pulling back, all the time revealing a larger and larger room - a cavern, really - in which crates and objects of all

descriptions disappear into the dark, unlighted reaches of the vast space. That's pretty much the impression one gets on the main floor at Compass Electronics in Paterson, NJ.

I got wind of Compass a year or so ago and knew it was a place I had to see. But I only get to the New York area once a year for a holiday visit to the family so this year was the first opportunity I had to actually make the trip. I'd been told that the place was strange but nothing prepared me for what I actually encountered.

The enormous room in "Citizen Kane" was part of a castle - Hearst Castle, although by another name. Compass is in a castle as well - the Paterson armory! This 19th century fortress takes up an entire city block in an area that has seen better days. Its battlements, including gun slits at the main door, give the combined impression of impregnability and mystery. The local drug dealers gave me a suspicious eye as I drove up in my mom's Plymouth Reliant with black wall tires on a freezing cold December day. Following the instructions given me by the owner, Arthur Bernstein, I pressed an enormous bell button near the graffiti covered door. I could hear the bell ringing somewhere in the deep recesses of the castle but nothing further happened for many minutes. Finally I heard shuffling footsteps, then the unlocking of many locks, and finally the door swung slowly open to the screeching of rusty hinges.

I felt rather like Mr. Harker visiting the home of the famous Transylvanian count as I followed Mr. Bernstein silently through various corridors of the dark, ice-cold building, finally arriving at the "display room". This small office area contained various selected items displayed on shelves, everything from enormous insulators to bombsights. Mr. Bernstein motioned me to a chair near an electric heater and graciously asked if it was too cold for me. I was freezing my California ass but said "No, it's fine..." only then noticing that the plug for the heater was on the floor a good foot away from the socket. This was going to be a cold visit!

We chatted for a bit about my radio interests and his business and then set off on the grand tour. Brothers and sisters, I have been to Cortlandt Street in the 50s, I have been to Radio & TV Labs in Chicago where you can't get more than six feet past the door, I have visited a woman who has the complete, operational radar system from a Vulcan bomber in her bedroom, I have rooted through the abandoned site of the WWI Telefunken station on Long Island and visited the site of Tesla's lab. But nothing prepared me for this dark, cold tour of Compass Electronics. Out flashlights pointing the way, Mr. Bernstein and I made our way through room after room piled from floor to ceiling with equipment, much of which I had never seen before. Finally we emerged into the main gallery of the building. Enormous, Eiffel tower style riveted steel support beams arched across an expansive room that once held political conventions, circuses and soldiers. Now it held rack after rack of equipment and crates that seemed to go on forever.

As we made our tour Mr. Bernstein pointed out crates of particular interest while I noted piles of Model 28ASR Teletypes on the 2nd and 3rd tiers above our heads. Pigeons swooped and cooed through the frigid air. Suddenly Mr. Bernstein stopped and asked "Who are you...?". I started to re-introduce myself but quickly realized that he was addressing not me but a nearby crate. While all seemed chaos to me, he detected that this particular item was not in its assigned location, something, I was assured, that would soon be remedied.

>From there we made our way to the basement - or basements, I should say, as there are two. These, while less vast, were even more bizarre than the main gallery since the equipment was arrayed around the ancient stone and masonry footings and arches of the old building.

There was no way to really take it all in on a single tour. Others have told me they have spent many days over several years exploring the hidden recesses of Compass Electronics. I myself came away with an 18" Pyrex insulator for the rhombic I hope some day to build - for \$3. In spite of my meager cash outlay Mr. Bernstein was hospitable and friendly as he bid me farewell. I jumped into the Reliant, turned up the heater to full blast and headed for the George Washington Bridge.

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Worth a special trip. Skyking sez check it out.

73,

Dick

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WPE2VT W6AWO
Collector Of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

End of BOATANCHORS Digest 1863
